TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 1066.

EDWIN A. MERRITT, COLLECTOR OF THE PORT OF NEW YORK, PLAINTIFF IN ERROR,

vs.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, Jr., OSGOOD WELSH, JOHN L. WELSH, AND BENJAMIN PERKINS.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED OCTOBER 15, 1881.

The amendment, therefore, would be ineffective if it permitted the assessment of the taxes which it declares not to be due and payable. Assessment and collection go together, and neither is possible till the tax is due and payable.

I submit that the true construction of the act as amended is, that no legacy is taxable until it vests in possession. To say that a tax shall be due and payable when a legacy vests in possession, is merely a way of saying that legacies shall be taxed when they vest in possession, and not till then. Upon this construction the repeal of the tax would clearly absolve the legatee in remainder.

GEO. PUTNAM,
for Plaintiff.

Bradley
Post 4-6-94 Field

Jan. 19 1882

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1 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the judges of the circuit court of the United States for the southern district of New York, greeting:

Because in the records and proceedings, and also in the rendition of the judgment, of a plea which is in the said circuit court before you, between Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, & Benjamin Perkins, plaintiffs, and Edwin A. Merritt, defendant, a manifest error hath happened, to the great damage of the said Edwin A. Merritt, as by his complaint appear: we being willing that the error, if any hath been, should be duly corrected, and full and speedy justice done to the party aforesaid in this behalf, do command you, if judgment be therein given, that, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you may have the same at Washington on the 3d Monday of the term commencing on the second Monday of October, eighteen hundred and eighty-one, in the said Supreme Court to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done thereon to correct that error what of right and according to the laws and customs of the United States should be done.

Witness the honorable Morrison R. Waite, Chief Justice of the said Supreme Court, the 4th day of October, in the year of our Lord one thousand eight hundred and eighty-one.

JOSEPH M. DEUEL, *Clerk.*

The foregoing writ is hereby allowed. October 4, 1881.

ADDISON BROWN.

2 (Indorsed:) 6140. Eq. ct., 348. U. S. Supreme Court. Edwin A. Merritt, plaintiff in error, against Samuel Welsh & al., defendants in error. Writ of error. S. L. Woodford, attorney for plaintiff in error.

Due service of a copy of the within writ of error is hereby admitted this 5th day of October, 1881.

STANLEY & CLARKE,
Attorneys for Defendants in Error.

UNITED STATES OF AMERICA,
Southern District of New York, ss:

3 I, Joseph M. Deuel, clerk of the circuit court of the United States of America for the southern district of New York, in the second circuit, by virtue of the foregoing writ of error and in obedience thereto, do hereby certify that the following pages, numbered from four to one hundred and twenty-one, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Edwin A. Merritt, plaintiff in error, against Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, & Benjamin Perkins, defendants in error, as the same remain of record and on file in said office.

In testimony whereof I have caused the seal of the said court to be hereunto affixed, at the city of New York, in the southern district of New York, in the second circuit, this seventh day of October, in the

year of our Lord one thousand eight hundred and eighty-one, and of the Independence of the United States the one hundred and sixth.

[SEAL.] JOSEPH M. DEUEL, *Clerk.*

4 *Summons.*

Superior court of the city of New York.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, Jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, plaintiffs,
against
EDWIN A. MERRITT, DEFENDANT.
} No. 1.

To the above-named defendant:

You are hereby summoned to answer the complaint in this action, and to serve a copy of your answer on the plaintiffs' attorneys within twenty days after the service of this summons, exclusive of the day of service, and in case of your failure to appear or answer, judgment will be taken against you by default for the relief demanded in the complaint.

Dated New York, Jan'y 9th, 1880.

STANLEY, BROWN & CLARKE,
Plaintiffs' Attorneys, Office No. 195 Broadway, New York City.

5 (Indorsed:) N. Y. superior court. No. 1. Samuel Welsh et al. ag'st E. A. Merritt. Summons. Stanley, Brown & Clarke, pl'ffs' att'ys, 195 B'way.

6 The President of the United States of America to the judges of the superior court of the city of New York, greeting:

We, for certain reasons, being desirous that our circuit court of the United States for the southern district of New York, in the second circuit, shall be certified of a certain cause commenced before you against Edwin A. Merritt, defendant, by Samuel Welsh & al., plaintiffs, do therefore command you that the record and proceedings in the said cause you distinctly and openly send to the said circuit court, at the city of New York, on the 2 day of February, 1880, as fully and amply as the same are remaining before you, by whatever names the said parties may be called therein, together with this writ, that our court may cause to be further done thereupon what of right ought to be done.

Witness Morrison R. Waite, esquire, Chief Justice of the Supreme Court of the United States, the 30 day of Jan'y, 1880.

[L. S.] JOHN I. DAVENPORT, *Clerk.*

STEWART L. WOODFORD,
Defendant's Attorney.

7 (Indorsed:) 6140. U. S. circuit court. Samuel Welsh & al. versus Edwin A. Merritt. Copy certiorari. Stewart L. Woodford, defendant's attorney. U. S. circuit court. Filed Nov. 9, 1880. Joseph M. Deuel, clerk.

I have this day personally served upon the clerk of the superior court of the city of New York a duplicate of the within writ, at the same time showing the original.

LOUIS F. PAYN,
U. S. Marshal.

JANUARY 31, 1880.

8 *Complaint.*

Circuit court of the United States for the southern district of New York.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, Jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, plaintiffs,
against
EDWIN A. MERRITT, DEFENDANT.

Plaintiffs complain—

1st. That defendant was, during the times hereinafter named, collector of customs of the United States at the port of New York.

2d. That plaintiffs were, during said times, partners in trade, under the firm name of S. & W. Welsh, and as such duly imported and entered at the port of New York the goods described in the bill of particulars annexed.

3d. That defendant, as such collector, exacted from plaintiffs as and for duties thereon, viz, fifty-four thousand five hundred and forty-four $\frac{84}{100}$ dollars.

4th. That by the laws of the United States the true duty upon said goods was forty-six thousand seven hundred and eighty-nine $\frac{32}{100}$ dollars; but plaintiffs, in order to obtain said goods, were compelled to pay the sum of seven thousand seven hundred and fifty-five $\frac{52}{100}$ dollars, in gold coin of the United States, in excess of the amount required by law.

5th. That plaintiffs filed with said defendant due and timely protests, in writing, upon each entry of said goods, against his decision exacting such duty, setting forth distinctly and specifically the grounds of objection thereto, and also as above stated.

6th. That plaintiff made due and timely appeals, in each case, to the Secretary of the Treasury, who has affirmed the decision of defendant as to certain of said entries, and as to the rest of said entries has neglected to answer said appeals, and more than ninety days had elapsed since said unanswered appeals when this action was commenced.

7th. That the bill of particulars, hereto annexed, states, for each importation separately, the date of entry at the custom-house, of the payment of duty in excess, of the filing of the said protests, of the appeal to the Secretary of the Treasury, and of his decision thereon, together with the other particulars required by law, and is made a part hereof.

8th. That said sum, so exacted as aforesaid, has never been repaid to plaintiffs, and is still due and owing to them.

Wherefore, plaintiffs demand judgment against defendant for seven thousand seven hundred and fifty-five $\frac{52}{100}$ dollars, in United States gold coin, with interest on the several sums named in the bill of particulars, from the several dates of payment as appear thereby, together with the costs and disbursements of this action.

STANLEY, BROWN & CLARKE,
Attorneys for Plaintiff.

9 STATE OF NEW YORK,
City and County of New York, ss;

, of the plaintiffs, being duly sworn, says he has read the foregoing complaint; that the same is true to his own knowl-

edge except as to the matters therein stated to be alleged on information and belief, and that as to those matters he believes it to be true.

Signed and sworn to before me, , 187 .

(Indorsed:) 6140. United States circuit court. Samuel Welsh et al. against Edwin A. Merritt. Complaint.

Due service of a copy hereof is hereby acknowledged this 9 day of Feb., 188 .

STEWART L. WOODFORD,
U. S. Attorney, Att'y for Def't.

Stanley, Brown & Clarke, pl'ffs' attorneys, 195 Broadway, New York City.

10 *Bill of particulars.*

Name of importer (for all the importations): S. & W. Welsh.

Description of goods.	Whence imported.	Name of vessel.	Date of invoice.	Date of entry at custom-house.	Amount of duty illegally exacted.
			1879.	1879.	
1. Sugars	Matanzas	Chas. F. Ward	Jan. 24	Feb. 10	2,897 81
2. Do	Havana	Carl Angell	Feb'y 14	M'ch 8	578 90
3. Do	do	J. L. Stewart	M'ch 7	" 25	48 10
4. Do	Cardenas	H. T. Wing	Aug. 11	Aug. 23	1,772 01
5. Do	Havana	E. J. McManemy	" 9	" 21	13 54
6. Do	Matanzas	John Swan	Aug. 5	" 23	2,050 27
7. Do	Havana	Santiago de Cuba	Oct. 7	Oct. 14	394 89
					7,755 52

Date of payment of duties in excess.	Protest filed.	Date of appeal to Secretary of the Treasury.	Date of Secretary's decision.
	1879.	1879.	1879.
Feb'y 28, '79, & Feb'y 7, '80	M'ch 17	Ap'l 5	Oct. 13
1879.			
M'ch 11 & Apr. 25	Ap'l 22	" 22	" 13
April 2 & 25	" 22	" 22	" 13
	S'p. 29	Oct. 13	Dec. 23
Sep. 23, 29, & Sep. 16	" 30	" 13	" 23
Oct. 4 & Nov. 18	Nov. 12	Nov. 12	" 18
Jan'y 14, 1880, Feb. 3	" 12	" 12	" 18

11 (Indorsed:) U. S. circuit court, southern district of New York. Samuel Welsh et al. against Edwin A. Merritt. Bill of particulars.

NEW YORK, *Feb'y* 9, 1880.

To STEWART L. WOODFORD, Esquire,
Defendant's Attorney:

SIR: Please to take notice that this action is brought to recover

duties illegally exacted by the defendant as collector of customs at the port of New York, and the within is the plaintiffs' bill of particulars.

STANLEY, BROWN & CLARKE,
195 *Broadway.*
Plaintiffs' Attorneys.

Due service hereof admitted this 9 day of Feb'y, 1880.

STEWART L. WOODFORD,
U. S. Att'y, Defendant's Attorney.

12 United States circuit court, southern district of New York.

SAMUEL WELSH & AL.
versus
EDWIN A. MERRITT, COLLECTOR, ETC.

The answer of the defendant herein, by Stewart L. Woodford, his attorney, to the complaint of the plaintiff' in the above-entitled action.

I. He admits he was, at the times in said complaint mentioned, collector of the port of New York, and in such official capacity received payment from the plaintiffs for and on account of duties due to the United States, under the laws thereof, upon certain importations of merchandise imported by said plaintiffs into the port of New York from foreign countries.

II. He alleges that any and all moneys received by him from plaintiffs at the times in said complaint mentioned were paid by said plaintiffs as a debt due by them to the United States, and not otherwise; and were received by defendant by virtue of his office as said collector and under the direction of the Secretary of the Treasury, and for and on account of the United States, and were forthwith thereafter and before the commencement of this action, or the service of any protest, paid into the Treasury of the United States; and that the amount of said moneys, so received from plaintiffs, were the amounts due from them to the United States, according to the rate of duty imposed by law upon the several articles of merchandise by them imported and assessed with duty, and no other sums than duties regularly assessed, and ascertained and liquidated according to law upon the plaintiffs' import entry thereof, were collected or received by defendant from the plaintiffs.

III. And defendant, further answering, denies that he has at this time sufficient information to form a belief as to the precise description of the merchandise contained in the several packages referred to in the said complaint, by the marks and numbers and description there given, except in so far as to state, and defendant herein answering doth aver and state, that said merchandise was not dutiable according to the laws of the United States at the rates specified in the complaint.

IV. And defendant, further answering, admits that plaintiff filed with defendant certain protests, but he denies that he has sufficient information to form a belief as to whether, upon the importations in question, protests and appeals were made by the plaintiffs conformable to the laws of the United States, and defendant leaves plaintiff to make such proof thereof as they may be advised.

V. And as to any other allegations in said complaint contained, not hereinbefore fully answered or admitted, defendant denies the same, and each thereof, and leaves the *the* plaintiffs to make such proof thereof as they may be advised.

Wherefore defendant demands judgment, that the complainant be dismissed with costs.

STEWART L. WOODFORD,
United States Attorney, Attorney for Defendant.

13 (Indorsed:) 6140. U. S. circuit court, southern district of New York. Samuel Welsh et al. vs. Edwin A. Merritt, collector, etc. Answer. To Stanley, Brown & Clarke, plaintiffs' attorney'. Rec'd Feb'y 14, '80.

14 At a stated term of the circuit court of the United States of America, for the southern district of New York, in the second circuit, held at the United States court-rooms, in the city of New York, on Tuesday, the 19th day of April, in the year of our Lord one thousand eight hundred and eighty-one.

Present, the honorable Wm. J. Wallace, judge.

SAMUEL WELSH ET AL.
vs.
EDWIN A. MERRITT. } 6140.

This case being still on trial, the jurors sworn in it are called, and severally answer to their names.

Mr. Clarke moves that the court direct the jury to find a verdict for the plaintiffs for $5,672.53.

Stewart L. Woodford, U. S. attorney, moves that the defendant be allowed to go to the jury upon certain questions of fact, which he states.

Mr. Woodford presents certain requests to charge, which said requests are denied by the court, and Mr. Woodford excepts to the ruling of the court in so doing.

Mr. Clarke is heard in support of said motion to direct the jury to find a verdict for the plaintiffs for $5,267.53.

Mr. Woodford is *is* heard in opposition to said motion.

The court directs the jury to find a verdict for the plaintiffs for the sum of $5,267.53.

15 The jury say that, by direction of the court, they find a verdict for the plaintiffs for the sum of five thousand two hundred and sixty-seven dollars and fifty-three cents, and so say they all.

16 United States circuit court for the southern district of New York.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, plaintiffs,
against
EDWIN A. MERRITT, DEFENDANT. } Judgment.

The issues in this action having been brought on for trial before the Hon. William J. Wallace, and a jury, at a stated term of this court, held at the United States court-rooms, in the city of New York, on the 11th day of April, 1881, and the issues having been tried, and a verdict having been duly rendered on the 19th day of April, 1881, for the plaintiffs, for the sum of five thousand two hundred and sixty-seven and $\frac{53}{100}$ dollars ($5,267.53) and the plaintiffs, costs having been duly taxed by the clerk of this court at the sum of seventy-four $\frac{85}{100}$ dollars—

17 Now, on motion of Stanley & Clarke, plaintiffs' attorneys, it is adjudged that Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, the plaintiffs, do recover of Edwin A. Merritt, the defendant, the sum of five thousand two hundred and sixty-seven and $\frac{53}{100}$ dollars ($5,267.53) found by the jury and one hundred forty-four & $\frac{84}{100}$ dollars interest on the same

5,267.53
144.84
74 85
5,487.22

from April 19th, 1881, with seventy-four $\frac{85}{100}$ dollars costs, making altogether the sum of five thousand four hundred and eighty-seven dollars and twenty-two cents.

Judgment signed this 4th day of October, A. D. 1881.

J. M. DEUEL, *Clerk.*

18 (Indorsed:) 6140. U. S. circuit court for the southern district of New York, Samuel Welch et al. against Edwin A. Merritt. Judg-ment roll. Stanley & Clarke, pl'ffs att'ys 158 B'w'y. Principal, $5,267.53; interest, 144.84; costs, 74.85—5,487.22. U. S. circuit court. Filed Oct. 4, 1881. Joseph M. Deuel, clerk.

19 United States circuit court, southern district of New York.

SAMUEL WELSH ET AL., PLAINTIFFS,
vs.
EDWIN A. MERRITT. } 6140.

Defendants' bill of exceptions.

The issues in this case came on for trial at the April term of this court, at a session held by the Hon. Wm. J. Wallace, district judge, sitting as circuit judge according to the statute in such case made and provided, at the court-room, in the city of New York, on the 11th, 12th, 13th, 14th, 15th, and 18th days of April, 1881, the plaintiff, being represented by Mess. Stanley, Brown & Clarke, and the defendant by the U. S. attorney.

And in the course of said trial divers exceptions were taken by the counsel for the defendant to the rulings of said court in the admission and exclusion of evidence, and to the direction of the court to the jury and to the refusal of the court to present the said issues or any of them to the jury or to charge the jury as requested by the de-

20 fendant, and in divers other respects which said several exceptions were then and there allowed by the court and more fully appear in this bill of exceptions.

To sustain the issues on their part the plaintiffs' counsel introduced as a witness OSGOOD WELSH, who, having been duly sworn, testified that plaintiffs were partners in business in Philadelphia, with a branch office in New York, and in the year 1879 imported from Cuba into the port of New York six cargoes of centrifugal sugar, of which certain papers produced were the original entries and invoices of the importations in suit produced from the custom-house. Plaintiffs' counsel read them in evidence as follows:

S. & W. Welsh. Invoice of sugar shipped per Norw'n bark Carl Angell, Sonerud master, bound to New York for acc. and risk of whom it may concern and consigned to order.

C. No. 1–674: 674 bags centrif. sug., sta. Lutgards; net, 201,835 lbs.
" " 675–1234: 650 " " " " Panchita; " 180,625 "
" " 1235–1900: 666 " " " " Assentista; " 181,512 "

1,900 bags; net, 563,972 lbs.

At 4⅜ c. per lb., f. o. b. currency, $24,673.77.
Havana, 14th February, 1879.

MORÉ, AGURIA & CO.

21 (3). *Merchandise imported 8th day of March, 1879, by S. and W. Welsh, Carl Angell, master, from Havana.*

NEW YORK, *March* 10, 1879.

Marks.	Nos.	Packages & contents.	Quantities.	Not above 7 D. S. Per cent.	Not above 7 D. S. Per cent.	Per cent.	Per cent.	Total.	Dutiable value of each package.
C.	1–1900	Nineteen hundred bags sugar.			1½ & 25 %	1½ & 25 %... 563,972 lbs..	2½	24,673 77 616 64	Havana, Feb'y 14, '79.
						572,091 Am..		25,290 14	

For C. H.

S. AND W. WELSH.

22 *S. and W. Welsh. Invoice of sugars shipped per Brit. brig I. L. Stewart, Crane, master, bound to New York for a/c & risk of whom it may concern, and consigned to order.*

(S) 1–228. 228 bags centrif. sug. Assentista, net..... 61,616 lbs.
" 229–300. 72 " " " D. P..... 20,238 "

300 Net..... 81,914 lbs.

@ 4½c. p'r lb., f. o. b. currency, $3,686.13.
E. E. Havana, 7th March, 1879.

MORÉ, AGURIA & CO.

23 *S. and W. Welsh. Invoice of sugars shipped per Brit. brig I. L. Stewart, Crane, master, bound to New York for a/c and risk of whom it may concern, and consigned to order.*

(S) 1–100. 100 hhds. mdo. sug., San Francisco, FB... 151,024
" 101–285. 185 " " " Maria Louisa..... 274,513

285 hhds. Net..... 425,537 lbs.

At 3½c. per lb. f. o. b., currency, 14,893.79.
E. E. Havana, 7th March, 1879.

MORÉ, AGURIA & CO.

24 (6) *Merchandise imported on the 25th day of March*, 1879, *by S. & W. Welsh, brig. I. L. Stewart, , master, from Havana.*

NEW YORK, *March* 25, 1879.

Marks.	Nos.	Packages & contents.	Quantities.	Not above 7 D. S. Per cent.	Not above 7 D. S. Per cent.	Per cent.	Total.	Total.	Dutiable value of each package.
S	1-285	Two hundred and eighty-five hhds.	.....	425,537 lbs.		.....	14,893 79		Havana, Mc'h 7, '79.
	1-300	Three hundred bags sugar.	.....	81,914 "		.....	3,686 13		
				507,451 "		.....	18,579 92		
							10,464 49		
				514,756 Am..		2½ %	19,044 41		

For C. H.

S. & W. WELSH.

25 *S. & W. Welsh. Invoice of sugar shipped by Heidegger & Co. on board the Am. brig John Swan, Hansen, master, bound to Delaware breakwater for orders by order and for ⅜ and risk of whom it may concern, and consigned to the order of Mess. S. & W. Welsh.*

J. 1–40.	40	hhds. sugar, w'h'g, net,	58,930	lbs.,	Caridad.
A. 1–250.	250	" " " "	379,115	"	Laberinto.
	290	" " " "	438,045	"	@ 4.80c. c'y cost & freight, 21,026 16
Less freight to breakwater					580 00
U. S. c'y					20,446 16

E. & O. E.

C. LEGGIS & CO.

MATANZAS, *August 5th*, 1879.

26 (8) *Entry of merchandise imported on the 23rd day of Aug.*, 1879, *by S. & W. Welsh in the John Swan, , master, from Matanzas.*

NEW YORK, *Aug.* 25, 1879.

Marks.	Nos.	Package & contents.	Quantities.	Per cent.	Not above 10 D. S. Per cent.	Not above 10 D. S. Per cent.	Per cent.	Total.	Dutiable value of each package.
J A.	1-40	Two hundred & ninety hhds. sugar.....	.....	.....	.....	2 & 25 %	.....	20,446 16	Matanzas, Aug. 5, '79.
" B.	1-250					438,045 lbs.			
A B.	1-66	Four hundred & twenty-five hhds. do...	.....	.....	.....	604,196	.....	22,562 59	Do.
" C.	1-101								
" D.	1-82								
" F.	1-79								
a C.	1-27								
S A.	1-106					042,241 lbs.	.....	43,008 75	
" B.	1-10							1,075 22	
" C.	1-14					1,057,247 Am.	2½ %	$44,083 97	

For C. H.

S. & W. WELSH.

27 *S. and W. Welsh. Invoice of sugars shipped per Amer. b'k'ne Eliza J. McManemy, Davidson, master, bound to New York for ¾c and risk of whom it may concern & consigned to order.*

1,122 hhds. mdo. sug. net 1,612,882 lbs., @ 3⅜c. per lb.... $54,443 76
411 bags certrif. " " 114,131 " " 4⅝ " " 5,278 55

Currency 59,713 37

E. E. HAVANA, *9th August*, 1879.

MORÉ, AGURIA & CO.

28 (10) *Merchandise imported on the* 21st *day of August*, 1879, *by S. and W. Welsh, McManemy, master, from Havana.*

NEW YORK, *Aug.* 22, 1879.

Marks.	Nos.	Packages & contents.	Quantities.	Per cent.	Not above No. 10 D. S. Per cent.	Not above No. 10 D. S. Per cent.	Per cent.	Total.	Dutiable value of each package.
A R A ..	1-411	Eleven hundred & twenty-two hhds. four hundred and eleven bags sugar.....	.....	.....	.....	2 & 25 %	2½ %		Havana, Aug. 9, '79.
						1,727,013 lbs.		59,713 31	
						1,751,880 Am.		1,493 83	
								$61,206 14	

For C. H.

S. AND W. WELSH.

29 *S. and W. Welsh. Invoice of sugar shipped per Amer. st'r Santiago de Cuba, Foote, master, bound to New York, for ¾c and risk of whom it may concern, and consigned to order.*

C. S. 1–500. 500 bags cent. sugar, ammonia, w'h'g net 125,780 lbs., @ 5c. per lb., f. o. b $6,289

E. & O. E. Havana, 7th October, 1879.

MORÉ, AGURIA & CO.

30 (12.) WAREHOUSE ENTRY.

Entry of merchandize imported on the 14*th day of October*, 1879, *by S. and W. Welsh, on the st'r Santiago de Cuba, , master, from Havana.*

Marks.	Nos.	Packages & contents.	Quanaities.	Per cent.	Per cent.	Per cent.	Per cent.	Total.	Dutiable value of each p'ck'ge.
C. S..	1-500.	Five hundred bags sugar.	.....	.....	125,780 lbs.	.....	.....	$6,289	Havana, Oct. 7, '79.
					127,488 lbs.	Am. 2½	.....	$157 25	
								$6,446 25	

For C. H.

S. AND W. WELSH.

31 The witness then continued:

Plaintiffs paid to defendant the duties according to the classification and liquidation made by the government officers on the invoices, and at the time of such payment duly protested against the exaction by the collector of two and one quarter cents a pound and twenty-five per cent. ad valorem upon the importation, 1st, by the Carl Angel, of 267 bags, part of the lot of 674 bags, and of the exaction of 2 cents a pound and 25 per cent. ad valorem on the lot of 280 bags, part of the lot of 560 bags, and of 2¼ cents per pound and 25 per cent. ad valorem on 88 bags, part of the lot of 666 bags, claiming that the legal rate of duty on all the above was only 1¾ cents a pound and 25 per cent. ad valorem.

Plaintiffs' counsel then proved due and timely written protest against the exaction and a due and timely appeal to the Secretary of the Treasury from the decision of the collector and the commencement of this suit within ninety days after the decision of the Secretary on said

32 appeal; and further proved that plaintiffs in like manner protested, appealed, and brought this suit against the collector upon the exaction upon the importation.

2nd. By the J. L. Stewart, of 2 cents a pound and 25 per cent. ad valorem, on thirty-eight bags of sugar, part of a lot of 228 bags, and on 2 cents a pound and 25 per cent. ad valorem on 19 bags, part of a lot of 72 bags, claiming that the legal rate of duty thereon was 1¾ cents a pound and 25 per cent. ad valorem; and further proved that plaintiffs in like manner protested, appealed and brought this suit against the exaction of 2 cents per pound and 25 per cent. ad valorem upon the importation.

3rd. By the bark J. McManemy, of 16 bags, part of a lot of 411 bags, claiming that the legal rate of duty thereon was only 1¾ cents a pound and 25 per cent. ad valorem.

And in like manner protested, appealed, and brought this suit upon the exaction by the collector upon the importation.

4th. By the brig John Swan, of two and a quarter cents a pound and twenty-five per cent. ad valorem, on 221 hogsheads,

33 part of a lot of 250 hogsheads, claiming that the legal rate of duty thereon was only one and three-quarter cents per pound and 25 per cent. ad valorem.

And further proved that plaintiffs in like manner protested, appealed, and brought this suit upon the importation by—

5th. The steamer Santiago de Cuba against the exaction of 2 cents a pound and 25 per cent. ad valorem on 67 bags, part of a lot of 500 bags, and of 2¼ cents a pound and 25 per cent. ad valorem on 433 bags, part of said lot of 500 bags, claiming that the legal rate of duty on the 67 bags was 1¾ cents a pound and 25 per cent. ad valorem, and that the legal rate of duty on the 433 bags was 2 cents a pound and 25 per cent. ad valorem.

And further proved:

6th. That upon the importation by the Henry T. Wing, plaintiffs, in like manner protested, appealed, and brought this suit against the exaction of 2 cents a pound and 25 per cent. ad valorem on 209 hogsheads, part of a lot of 266 hogsheads, and on 79 hogsheads, part of a lot of 227 hogsheads, and on 22 hogsheads, part of a lot of 45 hogs-

34 heads, and on a lot of 25 hogsheads, part of a lot of 28 hogsheads, claiming that the legal rate of duty thereon was 1¾ cents per pound and 25 per cent. ad valorem, and against the exaction of 2¼ cents a pound and 25 per cent. ad valorem on a lot of 57 hogsheads,

part of said last-mentioned lot of 82 hogsheads, claiming that the legal rate of duty thereon was 2 cents a pound and 25 per cent. ad valorem.

Plaintiff's counsel read the protests in evidence as follows:

[S. & W. Welsh, Philadelphia & New York. Cable address, Osgood, New York. P. O. box, 3216.]

NEW YORK, *April 22nd*, '79.

Hon. E. A. MERRITT, *Collector of Customs:*

SIR: You will please take notice that we hereby protest against the fixing or liquidation of the duty at 2 % and 25 % additional upon six hundred and thirty-five bags of sugar, marked C, imported by us in the bark Carll Angell, from Havana, March 8th, 1879, and entered
35 for consumption under bond 2685, and against the entry of the same and its endorsement upon the said bond, given to secure the payment of duties upon said sugars; that we claim, and shall insist, that the said liquidation is unlawful, and in excess of the amount legally chargeable for duty upon said sugars, they being not above ⅋ 7 Dutch standard in color, and consequently only chargeable with 1¾ c., and 25 % additional in accordance with section 2504, schedule G, Rev'd Stat. and sec. 3 of the act of March 3rd, 1875, making the excess of duty illegally charged about $577.

Your ob't serv't,

S. AND W. WELSH.

NEW YORK, 12*th Nov.*, 1879.

To the honorable collector of customs, New York:

SIR: We hereby protest, under section 2931, Revised Statutes, against the decision of the collector of customs at this port in assessing the rate and amount of duties on, viz:

Two hundred and twenty-one hogsheads sugar marked $^{J}_{B}$
36 (part invoice of seven hundred and fifteen hogsheads) sugars imported by us in the brig John Swan from Matanzas, on the twenty-third day of August, 1879, and entered at the custom-house by us on entry No. 72203, bond No. 9595.

We claim that under section 2504 Revised Statutes (schedule G) sugars pay duty according to their color only as regulated by the Dutch standard with the addition of twenty-five per centum of such duties as provided by section 3, act of March 3, 1875. We further claim that sections 2914 and 2915 Revised Statutes do not authorize the Hon. Secretary of the Treasury to fix any other standard of color or standard of grade of sugar other than the Dutch standard which is the only standard provided by the laws now in force.

We claim that under existing laws the sugars in question are subject to a duty of only as follows:

$^{J}_{B}$ 221 hh'ds. not above No. 7, Dutch standard in color, pay 1¾ c. & 25% and hold the collector of the port and yourself responsible for the difference and claim to have the difference refunded to us, being assessed contrary to existing laws in force. We also protest against the use of the polariscope as a means of testing the Dutch stand-
37 ard of color on the above-mentioned sugar.

Your ob'd't servants,

S. E. AND W. WELSH.

[S. and W. Welsh, Philadelphia & New York, Cable address: Osgood, New York, P. O. box, 3216.]

NEW YORK, *April 22nd*, 1879.

Hon. E. A. MERRITT, *Collector of Customs:*

SIR: You will please take notice that we hereby protest against the fixing or the liquidation of the duty at 2c. and 25 % additional upon fifty-seven bags of sugar marked (S) imported by us in the brig J. L. Stewart, from Havana, March 25th, 1879, and entered for warehuose under bond 3413 and withdrawn for consumption April 2nd, 1879, and against the entry of the same and its endorsement upon the said bond given to secure the payment of duties upon said sugars; that we claim and shall insist that the said liquidation is unlawful and
38 in excess of the amount legally chargeable for duty upon said sugars, they being not above 7 D. S. in color, and consequently only chargeable with 1¾c. and 25 % add'l in accordance with sec. 2504 Schedule G, Rev. Stat. and sec. 3 of the act of March, 3rd, 1875, making the excess of duty illegally charged about $48.

Your ob't servants,

S. AND W. WELSH.

NEW YORK, *12th November*, 1879.

To the honorable Collector of Customs, New York:

SIR: We hereby protest under section 2931 Revised Statutes of the United States against the decision of the collector of customs at this port in assessing the rate and amount of duties on, viz:

Five hundred bags sugar marked C. S. 1–500; sugars imported by us in the steamer Santiago de Cuba from Havana on the fourteenth day of October, 1879, and entered at the custom-house by us on entry No. 91975, bond No. 1195.

We claim that under section 2504 Revised Statutes (Schedule
39 G) sugars pay duty according to their color only, as regulated by the Dutch standard, with the addition of twenty-five per centum of such duties as provided by section 3, act of March 3, 1875. We further claim that sections 2914 and 2915, Revised Statutes, do not authorize the Hon. Secretary of the Treasury to fix any other standard of color or standard of grade of sugar other than the Dutch standard, which is the only standard provided by the laws now in force.

We claim that under existing laws that the sugars in question are subject to a duty of only as follows:

C. S. 67 bags not above No. 7 Dutch standard in color pay 1¾c. and 25 %; 433 bags above No. 7, not above No. 10 Dutch standard in color pay 2c. and 25 %, and hold the collector of the port and yourself responsible for the difference and claim to have the difference refunded to us, being assessed contrary to existing laws in force. We also protest against the use of the polariscope as a measure of testing the Dutch standard of color on the above-mentioned sugar.

Your ob'd't servants,

S. AND W. WELSH.

40 N. Y., *30th September*, 1879.

To the honorable E. A. MERRITT,
Collector of Customs, New York:

SIR: We hereby protest under section 2931, Revised Statutes of the United States, against the decision of the collector of customs at this port in assessing the rate and amount of duties on, viz, four hundred and eleven bags of sugar marked as follows:

A 1–411. Four hundred and eleven bags sugars imported by us in the bark Eliza J. McManemy from Havana, on the twenty-first day of August, 1879, and entered at the custom-house by us on entry No. 71675, bond No. 9526. We claim that under section 2504, Revised Statutes (Schedule G) sugars pay duty according to their color only, as reguiated by the Dutch standard, with the addition of twenty-five centum of such duties as provided by section 3, act of March 3, 1875. We further claim that sections 2914 and 2915, Revised Statutes, has not authorized the Hon. Secretary of the Treasury to fix any other standard of color
41 or standard of grade of sugar other than the Dutch standard, which is the only standard provided by the laws now in force.

We claim that under existing laws that the sugars in question are subject to a duty of only, as such, as follows:

A. 16 bags not above No. 7 Dutch standard in color pay 1¾ & 25 %.
395 " above No. 7, not above No. 10, Dutch standard in color, pay 2c. & 25 %; and hold the collector of the port and yourself responsible for the difference, and claim to have the difference refunded to us, being assessed contrary to existing laws in force.

We also protest against the use of the polariscope as a means of testing the Dutch standard of color on the above-mentioned sugar.

Your ob't servants,

S. AND W. WELSH.

The witness continued: After the sugars were landed we had them sampled; the samples were brought to our office by our sampler, Patrick Eagan, and the samples were by me and by my partner, Mr. Perkins, and by Mr. Eagan compared with the Dutch standard. I per-
42 sonally compared those by the Carl Angel, by the J. L. Stewart, and by the Santiago de Cuba with the Dutch standard. None of those by the Carl Angel or by the J. L. Stewart, which were protested against, were above No. 7, Dutch standard.

Of those by the Santiago de Cuba 67 bags not above No. 7, Dutch standard in color, and 433 bags were above No. 7 and not above No. 10. The articles imported in the several vessels enumerated in the entries produced were sold by us. They were sold as sugar. The Carl Angel cargo, the J. L. Stewart cargo, and the Eliza J. McManemy cargo, and one-half the H. T. Wing cargo were sold to Havemeyer Bro's & Co., refiners, of this city. The other half of the H. T. Wing cargo was sold to C. W. Durant & Sons. The John Swan and the Santiago de Cuba sugars were sold to Booth & Edgar, sugar refiners, of this city.

We obtained the Dutch standards by which we classified these sugars from the old importing house of H. E. Moring & Co., of this city. They have furnished them to the trade ever since I can remember. I have been in the sugar business about twenty years. The
43 Dutch standards are changed every two years, because they fade by exposure to light. Constantly exposed they will fade, grow lighter one number, the degree depending upon the care taken of them.

The method of comparing sugar with the Dutch standard in the sugar trade for the purpose of classification is and always has been as follows: A bottle like the Dutch-standard bottle and of the same kind of glass is filled with the sugar to be classified, and you hold this and Dutch standard side by side and determine which number of the Dutch standard the sample you are comparing is nearest to in color in a good light. For instance, a sugar not above No. 7, Dutch standard, would be one of the same or a darker color than the Dutch standard which

is marked No. 7. That is the general usage of the trade for determining the color of sugars. They do in the appraisers' department exactly as we do, exactly as I have described. I have seen the Dutch standards furnished by the government to the appraisers. In 1879 they were the same as our Dutch standards, so far as I could judge, and
44 the proof is that when the sampling is properly done we agreed substantially in our classification with that made at the custom-house. In respect to the particular lot protested against in the cargoes in suit we agreed substantially with the appraisers' department as to the color by the Dutch standard.

The sugars in question were not received by us from the planters, but they were consigned to us by merchants in Havana. They were sugars bought in the ordinary way of doing business by merchants in Havana and consigned to us. I have made efforts to ascertain through how many hands they had passed with the view of tracing their history and places of manufacture, but am not able to do so. I cannot tell through whose hands they passed between the estate and the particular merchant in Cuba who consigned them to us. The difference between the amount of the duties exacted and the amount claimed as above by us in the importations set forth in the bill of particulars, except the importation by the Charles F. Ward, upon which im-
45 portation no claim is made or evidence given in this suit, is, with interest, $5,267.53.

Being cross-examined, the witness said all the sugars in controversy are what is known as vacuum-pan centrifugal sugars. After the passage of the act of 1870 the importation of sugars for consumption became infrequent, and now nearly all imported sugars are sold to refiners, unless they are imported for the purpose of re-exportation. In buying and selling sugars the polariscope is used generally to ascertain the quantity of saccharine matter in sugar. The polariscope came into general use within ten years, I think, but I cannot state accurately. Buyers judge by the feeling, smell, color, and by the polariscope test. It is my impression that all these sugars have been classified by the appraiser under circulars of July 14 and Sept. 2nd, 1879. I think they were all finally classified under what was known as the dry test and not the wet test by the polariscope. The instructions of the Secretary are as follows:

46 *Sugars: Rates of duty on.*

TREASURY DEPARTMENT, *July* 19, '79.

It has been decided by the courts that the term Dutch standard in color as used in the statutes, means the color of the sugar obtained by the ordinary processes of manufacture as practised at the time of the enactment of the law adopting such standard, and that any means used to degrade the color of the sugars during or after the process of manufacture is a fraud upon the revenue.

Section 2915 of the Revised Statutes directs that the Secretary of Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers in such manner as to ascertain the true quality of such sugar.

The department has become satisfied that sugars that are not above No. 7, Dutch standard in color and which contain over ninety per cent. and not over ninety-four per cent. of crystallizable sugar, and sugars above No. 7 and not above No. 10, Dutch standard in color which

47 contain over ninety-four per cent. of crystallizable sugar are not made by the ordinary process of manufacture practised at the time of the enactment of the law adopting such standard.

In view of the foregoing and of the provisions by which such quality is measured by the Dutch standard in color, officers of the customs are hereby instructed that—

All sugars containing ninety per cent. and not more than ninety-four per cent. of crystallizable sugar the apparent color of which is not above No. 7, Dutch standard in color, shall be classified as above No. 7 and not above No. 10, Dutch stand*ing* in color.

All sugars containing more than ninety-four per cent. of crystallizable sugar the apparent color of which is not above No. 10, Dutch standard in color, shall be classified as above No. 10 and not above No. 13, Dutch standard in color.

H. F. FRENCH,
Acting Secretary.

COLLECTORS and other officers of the customs.

48 (4173).—*Sugars: Rates of duty to be exacted on.*

TREASURY DEPARTMENT, *September* 2, 1879.

The following is substituted for circular No. 125, of July 19, 1879:

It has been decided by the courts that the term Dutch standard in color, as used in the statutes, means the color of the sugar obtained by the ordinary processes of manufacture as practised at the time of the enactment of the law adopting such standard; and that any means used to degrade the color of the sugar during or after the process of manufacture is a fraud upon the revenue.

Section 2915 of the Revised Statutes directs that the Secretary of the Treasury shall by regulation prescribe and require that samples from packages of sugar shall be taken by the proper officers in such manner as to ascertain the true quality of such sugar. The department has become satisfied that sugars, as imported, which are not above No. 7, Dutch standard in color, and which contain over ninety per cent. of crystallizable sugar, and sugars not above No. 10, Dutch standard in
49 color, which contain over ninety-five per cent. of crystallizable sugar, are not made by the ordinary process of manufacture practised at the time of the enactment of the laws adopting such standard.

These classes of sugar, however, as imported contain from two to three per cent. of water, which is liable to vary in quantity by exposure, and complaint has been made since the issueance of circular No. 125 that in making tests of sugar thereunder uniform results cannot be obtained, because of the evaporating of more or less water from the several samples.

Java sugars, which contain very little water, yield a large percentage of crystallizable sugar on that account when tested as imported.

In view of the foregoing and of the provisions by which such quality is measured by the Dutch standard in color, officers of the customs are hereby instructed that all sugars the apparent color of which, as imported, is not above No. 7, Dutch standard in color, and which contain over ninety-three per cent. and not over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance,
50 shall be classified as No. 7 and not above No. 10, Dutch standard.

All sugars the apparent color of which, as imported, is not above No. 10, Dutch standard in color, and which contain over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance, shall be classified as above No. 10 and not above No. 13, Dutch standard.

These percentages of sugar in the dry substance are considered the practical equivalents of those above specified of sugar as imported before the water is evaporated.

In any case where customs officers shall become satisfied that the owner, importer, agent, or consignee of such sugars, making entry thereof, has knowledge that they were artificially colored for the purpose of defrauding the revenue, seizure of such sugar will be made and proceedings taken to enforce their forfeiture.

By order.

H. F. FRENCH,
Assistant Secretary.

COLLECTORS and other officers of customs.

51 Nearly all imported sugars are now sold to refiners, unless they are imported for the purpose of being re-exported.

I think some tobacconists and other manufacturers buy sugar without its being refined.

I never knew that when the Dutch standard in color was adopted as a means of assessing sugars for duty that the color indicated the value of the sugar very nicely. In conjunction with other things it did indicate it approximately; very nearly in some cases, if the sugar was intended for consumption.

The amount of crystallizable sugar is not the main test of value for refining purposes. Any refiner will tell you that he sells a very inferior article in saccharine matter at a good price and makes a good profit out of it.

Plaintiff's counsel then called as a witness, BENJAMIN D. SMITH, who, having been duly sworn, testified as follows:

I am a member of the firm of H. E. Moring & Co. Our firm have been in the habit of importing for many years Dutch standards of
52 sugar into this country for sale to the sugar trade, refiners, importers, and brokers. I believe the Dutch standard is recognized and used all over the world. We have furnished them to the Canadian Government and the West Indies. I understand they are like those used in the custom-house here. They are prepared under the direction of the Dutch Trading Company of Holland, and are put up by the firms of brokers in Holland; one firm at Amsterdam and one at Rotterdam. They have certain standards of color and they mix what I suppose to be sugar until it comes to that certain color. The standards run from No. 5 to No. 20. The colors grow lighter as they run higher. There is a new set issued every two years. The labels on the sealed bottles for this year show that the standard now in use is the 21st edition. If they have been issued every two years heretofore that would carry them back to 1838.

BENJAMIN PERKINS, being duly sworn, testified that he had been a member of plaintiff's firm for fifteen years and compared, with
53 Patrick Eagan, samples of the sugar protested against, imported by the Eliza J. McManem, the John Swan, and the H. T. Wing, with the Dutch standards in color.

The 221 hogsheads of the John Swan out of the lot of 250 hogsheads were not above No. 7, Dutch standard in color.

Of the Henry T. Wing, we found 209 hogsheads out of the lot of 266 hogsheads, and 79 hogsheads out of the lot of 227 hogsheads, and 22 hogsheads out of the lot of 45 hogsheads, and 25 hogsheads out of the lot of 82 hogsheads not above No. 7, Dutch standard in color and 57 hogsheads out of the lot of 82 hogsheads above No. 7 but not above No. 10, Dutch standard in color.

Plaintiff's counsel then called as a witness ABRAHAM G. REMSEN, who, being duly sworn, testified as follows:

I am examiner of sugar in the custom-house, at the appraiser's stores. I have been such examiner nine years; before that I was a sampler of sugars in the custom-house for three years. My duty as sampler was to collect samples of the sugars by boring the casks. My duty
54 as examiner was to compare the samples of sugar imported with the Dutch standards put up in Amsterdam furnished by the Secretary of the Treasury. The method of comparison was to take the samples of sugar and place them in glass bottles and compare them by the eye with the Dutch standard. That has been the method of comparison ever since I came into the department.

I found that practice in existence when I came into the department. I have the records of the examination of sugars imported by plaintiffs by all the vessels named in the bill of particulars. I examined the sugars and found them to be of the color by the Dutch standard which has been stated by Mr. Welsh and by Mr. Perkins, and made a record of my examination at the time in this book which I have produced.

Being cross-examined, the witness said:

I know the writing of Mr. Frank Hay upon the invoices; he is the assistant appraiser. He is guided by our pencillings upon the invoices in making his return. He gets his data for his return from the examiners. He does not personally examine the sugars.

55 Plaintiff's counsel then called as a witness Patrick Eagan, who, being duly sworn, testified as follows:

I am a sugar sampler for plaintiffs. Have been familiar with that business for eighteen years. I remember the cargoes of sugar referred to in the bill of particulars, and drew samples of these cargoes and gave them to Mr. Welsh and to Mr. Perkins for classification for the Dutch standard.

Plaintiffs' counsel then rested.

Defendants' counsel then called as a witness FRANK HAY, who, having been duly sworn, testified as follows:

The classification of the sugar on the invoices in this suit are in my handwriting. I did not personally make the examination of the sugars, nor make any tests by the polariscope. I wrote up the classifications on the reports of the examiners, who examined the sugars by the Dutch standard, and from the books of the examiner who made the polariscopic tests. We classified the sugars under a department letter dated December 13. We reliquidated the duties by the dry test. The
56 entries were all finally classified or reclassified under the Treasury circular of September the 2nd. The two circulars were in and the wet test was in July; the other, the dry test, in September.

The defendant's counsel then offered the returns of the witness in evidence, for the purpose of showing the action of the government.

CARL ANGELL.

The sugars C, 267 bags, 280 bags, & 88 bags, classified as not above No. 7, D. S., are, in my judgment, colored by the formation of caramels after crystallization. The true color would be above No. 7 and not above No. 10, D. S. M'ch 29, '79.

FRANK HAY,
Ass't Appraiser.

Reclassification on dry test in accordance with department letter dated Oct. 13, 1879.
Jan'y 6, 1880.

674 bags; 267 bags not above No. 7; test, 97.44; duty, 2¼ and 25 per c.
560 " 280 " " " " " " 95.91; " 2 & 25 pr. ct.
666 " 80 " " " " " " 97.85; " 2¼ & 25 " "

FRANK HAY.

57 J. L. STEWART.

Ⓢ 1–100. 100 hogsheads, 25 not above No. 7, D. S., & 75 above No. 7 and not above No. 10, D. S.

Ⓢ 101–285. Hogsheads, 185; 162 above No. 7 & not above No. 10, D. S., 23 above No. 10 & not above No. 13, D. S.
Sugars as noted 2½, 2, 1¾, & 25 per cent.

A. G. R.
FRANK HAY.

Approved.

S. B. DUTCHER, *Appraiser.*

Ⓢ 1–228. 228 bags; 38 not above No. 7, D. S.
reclassified on dry test 96.91.
duty, 2 & 25 per cent.
175 above 7, not above 10, D. S., 96.91.
duty, 2 & 25.
15 above 10, not above 13, D. S.
duty, 2½ & 25.

228

S. 229–300. 72 bags; 19 not above 7; 2c. & 25 p'r c't.
43 above 7 not " 10, D. S.
10 " 10 " " 13, D. S.

72

The sugars Ⓢ, 38 bags and 19 bags, classified as not above No. 7, D. S., are, in my judgment, colored by the formation of caramel after crystallization. Their true color would be above No. 7 and not above No. 10, D. S.
April 5, 1879.

FRANK HAY,
Ass't Appraiser.

Reclassified on dry test, in accordance with department letter dated Oct. 13, 1879. Jan. 6, 1880.

FRANK HAY.

58 ELIZA J. MCMANEMY.

1,122 hogsheads; 285 h'd; apparent color not above No. 7, D. S.
803 " above No. 7, not above No. 10.
34 " " " 10, " " " " 13.
411 bags; 16 bags; not above No. 7, D. S., test 93.20, duty 2 & 25.
395 " above No. 7, not above No. 10, test 93.70, " 2c. & 25.

JOHN SWAN.

250 hhds.; 221 not above No. 7, test 97.05, duty 2½ & 25.
29 above No. 7, not above 10, test 96.51, duty 2 & 25.

FRANK HAY.

59 SANTIAGO DE CUBA.

500 bags; 67 not above No. 7, D. S., test 96.42, duty 2 & 25.
433 above 7, not above 10, " 97.73, " 2¼ & 25.
Classification in accordance with department circular, Sept. 2, 1879.
Oct. 20, '79.

FRANK HAY.

Approved.

S. B. DUTCHER, *Appraiser.*

60 On behalf of the defendant, HENRY J. ABBOTT was called to testify.

He testified that he was employed at the custom-house in New York City as an expert in sugars, that he was familiar with the business of sugar manufacture, and had been so for several years; that he was familiar with the mode of making sugar by the vacuum-pan centrifugal machine process, and he described the process of making such sugars as follows:

After the juice is extracted from the cane, it goes into tanks where the impurities are separated from it, usually by the use of lime. Lime is used to neutralize the juice so that the impurities can be separated. Then the juice is boiled down in an open pan to a certain density; usually to 20 degrees, Beaume (that is an instrument made by Beaume for the purpose of ascertaining the density of the juice), then the juice becomes syrup, and is carried to subsiding tanks from which it is drawn into the vacuum-pan, and in the vacuum-pan the juice is boiled until it becomes sugar.

The sugar crystals are formed in the pan by evaporating water.

61 In the vacuum-pan they form instantly; that is, as soon as a certain density is arrived at, at a temperature of about 130 to 160 degrees Fahrenheit. When the vacuum-pan is full or is as full as the pan will hold without boiling over, it is struck out of the pan.

The syrup is drawn into the pan until the whole mass is crystallized, or crystallized as much as can be done, so as to leave enough syrup as will cause the sugar to flow from the vacuum-pan.

The vacuum-pan is a machine shaped very much like an egg and with pipes connecting with a pump which extracts the air from the pan.

In the pan are worms or coils through which steam passes. The air being extracted from the vacuum-pan enables the syrup to boil at a low temperature, thereby forming little or no coloring matter. When the

pan is full this material is struck from the pan. It is then a mixture of sugar and molasses. Usually the molasses is separated from it by the centrifugal machines. The sugar is separated from it, and then we have two products—sugar and molasses.

The centrifugal machine is an arrangement something like two
62 tubs. One tub is stationery, the outside one, the inside one is perforated and situated on a shaft, and the mixture from the vacuum-pan, which is sugar generally called massacute in Cuba, is put into this inside tub, and that tub is started in motion and the molasses goes out through the small hole and leaves the crystal sugars inside of the inner tub. The machine is afterwards stopped and the sugar is taken out.

Samples of the sugars which were imported by the plaintiffs in the bark Carl Angell were shown to the witness, and with respect to them he testified that, in his opinion, they were the first products of the cane-juice boiled in the vacuum-pan, and afterwards centrifugates. What I mean by the first product is the first boiling from the cane-juice, the first boiling in the vacuum-pan. The second product would be sugar taken from molasses that is driven from the first-product sugars, which would be a lower grade of sugar; the second product would be sugar obtained by reboiling in the vacuum-pan the molasses that is
63 driven off from the crystals obtained by the first boiling in the vacuum-pan and then passing it through the centrifugal machine to throw off the molasses, so that as the process advances the grade of the sugar becomes lower. The first product is made from the juice, and the second product is made from the molasses that has been centrifugated.

Q. At what point in the process of manufacture did the sugar acquire, in your opinion, the color which it now presents?

(Objected to by plaintiffs' counsel as incompetent and immaterial.)

A. After the crystal was formed in the vacuum-pan a[illegible] mass from the vacuum-pan had been drawn off, but after[illegible] zation—after the sugar is made—before it goes into th[illegible]

That said sugars were colored, in his opinion, by colorin[illegible] duced after the crystals were formed in the vacuum-pa[illegible] mass from the vacuum-pan had been drawn off, but aft[illegible] was made, and before it went into the centrifugal
64 that the color of the sugar had nothing to do with t[illegible] that it was made from; that is, from the cane-juice [illegible] was his opinion that the color of said samples of sugar w[illegible] by burnt molasses and excessive lime added to the burnt [illegible] drawn into the vacuum-pan after the crystals were for[illegible] burnt molasses was drawn into the vacuum-pan when th[illegible] ready to be centrifugated, and that said samples would hav[illegible] above No. 7 and not above No. 10, Dutch standard in colo[illegible] dinary process of manufacturing vacuum-pan sugars had be[illegible] and all the molasses left in it in the vacuum pan, and that [illegible] in question are of sugar thoroughly centrifugated, that i[illegible] kept in the centrifugal long enough to drive the molasses [illegible] that the coloring matter did not leave the sugar in the cen[illegible] cause it was so dense and was fastened on to the crystals in t[illegible] pan.

Being cross-examined, the witness testified:

65 My first employment on a sugar estate was in 1865 or 1866, in Cuba. I was there two seasons. I then had no experience; learned

58 ELIZA J. MCMANEMY.

1,122 hogsheads; 285 h'd; apparent color not above No. 7, D. S.
803 " above No. 7, not above No. 10.
34 " " 10, " " " 13.
411 bags; 16 bags; not above No. 7, D. S., test 93.20, duty 2 & 25.
395 " above No. 7, not above No. 10, test 93.70, " 2c. & 25.

JOHN SWAN.

250 hhds.; 221 not above No. 7, test 97.05, duty 2½ & 25.
29 above No. 7, not above 10, test 96.51, duty 2 & 25.
FRANK HAY.

59 SANTIAGO DE CUBA.

500 bags; 67 not above No. 7, D. S., test 96.42, duty 2 & 25.
433 above 7, not above 10, " 97.73, " 2¼ & 25.
Classification in accordance with department circular, Sept. 2, 1879.
Oct. 20, '79.
FRANK HAY.

Approved.
S. B. DUTCHER, *Appraiser.*

60 On behalf of the defendant, HENRY J. ABBOTT was called to testify.

He testified that he was employed at the custom-house in New York City as an expert in sugars, that he was familiar with the business of sugar manufacture, and had been so for several years; that he was familiar with the mode of making sugar by the vacuum-pan centrifugal machine process, and he described the process of making such sugars as follows:

After the juice is extracted from the cane, it goes into tanks where the impurities are separated from it, usually by the use of lime. Lime is used to neutralize the juice so that the impurities can be separated. Then the juice is boiled down in an open pan to a certain density; usually to 20 degrees, Beaume (that is an instrument made by Beaume for the purpose of ascertaining the density of the juice), then the juice becomes syrup, and is carried to subsiding tanks from which it is drawn into the vacuum-pan, and in the vacuum-pan the juice is boiled until it becomes sugar.

The sugar crystals are formed in the pan by evaporating water.

61 In the vacuum-pan they form instantly; that is, as soon as a certain density is arrived at, at a temperature of about 130 to 160 degrees Fahrenheit. When the vacuum-pan is full or is as full as the pan will hold without boiling over, it is struck out of the pan.

The syrup is drawn into the pan until the whole mass is crystallized, or crystallized as much as can be done, so as to leave enough syrup as will cause the sugar to flow from the vacuum-pan.

The vacuum-pan is a machine shaped very much like an egg and with pipes connecting with a pump which extracts the air from the pan.

In the pan are worms or coils through which steam passes. The air being extracted from the vacuum-pan enables the syrup to boil at a low temperature, thereby forming little or no coloring matter. When the

pan is full this material is struck from the pan. It is then a mixture of sugar and molasses. Usually the molasses is separated from it by the centrifugal machines. The sugar is separated from it, and then we have two products—sugar and molasses.

62 The centrifugal machine is an arrangement something like two tubs. One tub is stationery, the outside one, the inside one is perforated and situated on a shaft, and the mixture from the vaccum-pan, which is sugar generally called massacute in Cuba, is put into this inside tub, and that tub is started in motion and the molasses goes out through the small hole and leaves the crystal sugars inside of the inner tub. The machine is afterwards stopped and the sugar is taken out.

Samples of the sugars which were imported by the plaintiffs in the bark Carl Angell were shown to the witness, and with respect to them he testified that, in his opinion, they were the first products of the cane-juice boiled in the vacuum-pan, and afterwards centrifugates. What I mean by the first product is the first boiling from the cane-juice, the first boiling in the vacuum-pan. The second product would be sugar taken from molasses that is driven from the first-product sugars, which would be a lower grade of sugar; the second product would be sugar

63 obtained by reboiling in the vacuum-pan the molasses that is driven off from the crystals obtained by the first boiling in the vacuum-pan and then passing it through the centrifugal machine to throw off the molasses, so that as the process advances the grade of the sugar becomes lower. The first product is made from the juice, and the second product is made from the molasses that has been centrifugated.

Q. At what point in the process of manufacture did the sugar acquire, in your opinion, the color which it now presents?

(Objected to by plaintiffs' counsel as incompetent and immaterial.)

A. After the crystal was formed in the vacuum-pan and before the mass from the vacuum-pan had been drawn off, but after the crystallization—after the sugar is made—before it goes into the centrifugal.

That said sugars were colored, in his opinion, by coloring matter produced after the crystals were formed in the vacuum-pan before the mass from the vacuum-pan had been drawn off, but after the sugar

64 was made, and before it went into the centrifugal machine, and that the color of the sugar had nothing to do with the substance that it was made from; that is, from the cane-juice; and that it was his opinion that the color of said samples of sugar was produced by burnt molasses and excessive lime added to the burnt molasses and drawn into the vacuum-pan after the crystals were formed; which burnt molasses was drawn into the vacuum-pan when the sugar was ready to be centrifugated, and that said samples would have had a color above No. 7 and not above No. 10, Dutch standard in color, if the ordinary process of manufacturing vacuum-pan sugars had been observed and all the molasses left in it in the vacuum pan, and that the samples in question are of sugar thoroughly centrifugated, that is, had been kept in the centrifugal long enough to drive the molasses from it, and that the coloring matter did not leave the sugar in the centrifugal because it was so dense and was fastened on to the crystals in the vacuum-pan.

Being cross-examined, the witness testified:

65 My first employment on a sugar estate was in 1865 or 1866, in Cuba. I was there two seasons. I then had no experience; learned

the business there. My next employment was in Louisiana; was there in 1874 and in 1875 as an engineer. My last employment as a sugar-boiler was in 1869, in Peru. My official title is special inspector of the Treasury Department. When cane is taken from the field, it is first ground in a mill. There are quite a variety of mills. Some squeeze the cane tighter than others, and when they do, they get more juice and more of other matter also. There are upright mills and horizontal mills. I don't know as I could call obtaining juice by one an ordinary process more than the other. The horizontal is more ordinary now than 15 years ago. The horizontal mills are more used. There has been a change. The next process in the manufacture of sugar is that the juice goes into tanks and is then clarified by the use of lime. Lime is always added as far as I have seen. I have found that there are processes where
66 lime is not used. I have not observed the other processes. Potash and magnesia may be used instead of lime. Lime makes the sugar lighter and brighter. Lime is used for the purpose neutralizing the acidity of the juice. If lime is used beyond the point of neutralizing the acidity it darkens the juice. It takes up the dirt and impurities and prevents crystallization. I have observed the use of lime on perhaps fifty plantations. The practice was not to use lime intentionally beyond the point of acidity. There were differences in the manner in which they used lime on the plantations. In some cases they used it dry as it came from the mill cold. In other cases they used it in the clarifier when heat was added. In some cases they put it into the juice as soon as it came from the mill while it was cold. It was used in the clarifiers to clarify in making sugar in the ordinary way, or in the natural way. I have been on plantations where they made sugars in the ordinary way, or in the natural way. I have been on plantations where they made sugar in an unnatural way. In regard to those plantations where I say sugar was made in an unnatural way, after the juice
67 was thoroughly clarified and reduced to about 20 Beaume double the quantity of juice was then added and that drawn into the vacuum-pan and boiled. At the time that was added there was cane-syrup there. There was no granulation. Then in the vacuum-pan the syrup was boiled to crystals. No more lime was added after that. I regard that process as an unnatural process of manufacturing sugar. The product of that unnatural process when it came out of the centrifugal machine, after boiling down, was dark sugar. After the liquor was limed in these tanks or drawn into the vacuum-pan and crystallized, the heat was raised in the vacuum-pan after the pan was boiled ready to strike to about 180° or 190°, thereby forming coloring matter by the assistance of the lime or cutting the crystal, burning it on to the crystal. Then it was struck from the pan and purged in the centrifugal, in one instance some ten or fifteen minutes, which brought the color to about 8 or 9, Dutch standard. The land on which the cane grows affects slightly the color of the sugar and its strength. I mean by
68 strength of the sugar the amount of pure sugar in 100 parts. I mean by pure sugar crystallized cane-sugar. There are other saccharine properties in the cane-juice than crystallizable sugar. Invert sugar, sugar that is sour, will not crystallize and goes to make up molasses and comprises 20 to 30 per cent. of what we call molasses. Therefore if lime is not used up to the point where it completely conceals all the acidity in the juice, a portion of the cane-sugar will be lost by being inverted, as the term is, to another crystallization. And when lime is used up to or beyond the point of neutrality, you get a larger product than when sufficient is not used to correct all acidity in the

juice. You also get a larger crystal and a crystal of any size you please. It is not abnormal or unnatural to make a large crystal. Large crystals are made by drawing sufficient syrup into the pan and boiling it to a certain density. When you have got all the crystals you can out of the charge you have in the pan, then you draw another charge into the pan and the crystallized sugar in that charge goes on to the sugar that you have just crystallized and so on, and you can
69 keep up that operation for a week until you get the crystals of the size of a peanut. The process of crystallization tends to make nearly pure sugar in the crystals by throwing off the impurities, but some coloring matter will be taken up in the crystal. The substance that is put into the vacuum-pan is called yeappa in Cuba. The juice is boiled to a certain density in the open pan before it is passed into the vacuum-pan. The juice in the open pan is raised to about 220° Fahrenheit. The heat rises as the density rises. The heat in the vacuum-pan is from 130° to 160°. With the assistance of lime the syrup will burn in the vacuum-pan at about 180°. Special processes are sometimes used to lighten the sugar. I do not call them unnatural processes.

The distinction is this: If a planter undertakes to make a dark sugar by the application of lime, it is an unnatural process. If he undertakes to make a light sugar by the use of sulphuric acid or sulphuric gas, that is a natural process. A very rainy season makes a sugar lighter. When the season is rainy and the juice is acid and they fail
70 to use lime enough to neutralize all the acidity, the product will be of a lighter color and less sugar, so that you may then have a sugar of a high number, Dutch standard, and a low polarization.

All processes of treatment of the sugar after it comes from the centrifugal machine, and processes of refinement, and the same with the process it undergoes in the vacuum-pan in the centrifugal machine. A little water or a little molasses is frequently put into the centrifugal machine to assist in the process of fixing the crystals, and that I think is a process of refinement. The article as it comes from the vacuum-pan and unpurged is an article of commerce and is sold as unpurged sugar, and called melado here. The name in Cuba is massecute. It is a Spanish word meaning the whole mass. I never knew the whole mass was classified as sugar at the custom-house until after the act of 1875 was passed which provided that it should be classified as sugar. It is generally treated by the custom-house as melado when it
71 comes in tight casks, and I have seen it imported in that shape.

On behalf of the defendant a witness named EDWARD SHEARER was called:

He testified that he was an analytical chemist, in charge of the United States laboratory at the port of New York. He produced samples of all the sugars involved in the suit in question from the custom-house. He further produced the Dutch standard in color which was in use at the custom-house by direction of the Secretary of the Treasury during the year in which the sugars in suit were classified for duties. He further testifies, that he had examined and analized said Dutch standard, and that he had ascertained what material was contained in said Dutch standard, and that it was sugar—sugar in a natural state perfect grains. It was not a refined sugar, and therefore contained some of the impurities that are always present in sugar. It was, in my judg-

ment, what was known as a clayed sugar, and each different number of the Dutch standard in color indicated a different grade
72 of sugar; that the difference in color was produced by the difference in the percentage of crystallizable sugar contained in each sample, and the greater or less amount of molasses present; that number 7, of Dutch standard in color, had more molasses and less crystallizable sugar than the next higher number, and this was the rule with each succeeding number.

Witness further testified that he had polarized the said Dutch standard; that the polariscope was invented about 1847, and is an in instrument for the purpose of determining the percentage of crystallizable sugar in sugar solution, and has been in general use in the United States since the year 1870, and that it afforded the most accurate test for the determination of the percentage of crystallizable sugar known in chemistry.

Samples of the various importations of the plaintiffs were shown the witness, and he testified that he had applied the polariscope test to them and had a record of the test of the several sugars.

Questioned by defendant's counsel; What was the result of the polariscope test of the Dutch standard, and the grades of these various sugars according to that test?

(Objected to by counsel for plaintiff.)

73 The COURT. It is undoubtedly desirable for the purpose of shortening the trial that counsel may be informed of the views of the court, so that they can marshall their evidence accordingly. The discussion of the question has taken a broader range than the question necessarily required, and for the present the evidence will be excluded and the defendant may have an exception, but if any evidence is offered which will fall within the ruling which I now propose to make, the evidence will be competent and will be received. Evidence may be given to show what the Dutch standard is. It is important to ascertain by the evidence of experts what is meant by the Dutch standard, the term used in the tariff acts. I think it desirable that all the evidence regarding the origin, history, use, and mode of use of the Dutch standard should be in the case. The evidence upon the other points must be confined to that which will tend to show that the color of the plaintiffs' sugars was an artificial color, imparted after the process of manufacture.

74 The duty was exacted under color of those provisions of the tariff acts which classify the grades of sugar for duty purposes by numbers according to the Dutch standard in color. The language of the act imposing the duty is as follows:

On sugars not above No. 7, Dutch standard in color, 1¾ cents per pound; sugar above No. 7, and not above No. 10, Dutch standard in color, two cents per pound.

And then there was a subsequent act imposing 25 per cent. additional duties.

Now it is of the first importance to determine what is meant by the classification by numbers according to the Dutch standard in color, and to ascertain the meaning of the classification it is necessary to ascertain what the Dutch standard in color is according to commercial signification, or rather, what it was at the time the act was passed under which the duties were imposed. There are certain facts in regard to the Dutch standard—what its origin was, how it was used, what it was supposed to represent—which have already been shown, and there are others which, I assume from the argument of the counsel for
75 the defendant, are not to be controverted; and from these it is

to be assumed that the Dutch standard consists of a series of numbers, and each of them stands for a distinct shade of color, as shown by sample sealed in a glass jar, and each number stands for a distinct grade of sugar. It has been shown, and it is understood not to be disputed, that for a very long period of time the Dutch standard had been used in commercial transactions throughout the world. The Secretary of the Treasury, in his testimony before the Congressional committee, as read in the argument yesterday, stated that at that time it had been in use for a hundred years, if I remember correctly, and it has also been shown, and I don't understand it to be disputed, that the grade of sugar since the Dutch standard has been used has always been ascertained by comparing its color with that of the various numbers of the standard, the grade of the sugar being fixed by the color of that number of the standard with which it was found to correspond.

As thus applied, it was a permanent conventional rule for grading sugars. The standards do not purport to give
76 the amount of pure sugar in a grade of a given number This was not the test which they were designed to afford. The object was simply to give a number which would represent a grade of sugar of a particular color. It was a color standard by which the several grades of sugar might be identified. Now, undoubtedly, it did originally represent the quality and intrinsic value of the grade; but it was not adapted to correspond with the changes which might be introduced from time to time in the art of making sugar, by reason of which the intrinsic value and quality of a particular grade became more and more independent in color. So it seems to me that it must be assumed that the Dutch standard was simply intended as a color criterion by which to identify the different grades of sugar. Now, if I am correct in this—and of course I am proceeding now upon an assumption that the evidence will justify the facts I have stated—if I am correct in this, it follows, that when Congress classified sugars according to the Dutch standard they intended simply to classify them according to color, assuming, quite likely, that color represented
77 quality; and at the time when the tariff act now under consideration was passed, undoubtedly color did represent quality much more accurately at any rate than now. And Congress intended to establish a guide for the classification of sugars which might be understood by merchants, by dealers, and by the officials, and they took the commercial classification—the classification which could be made by the eye. Well, now, it seems to me that because it has been found since the classification was adopted color is no longer an adequate test of quality, but has become a fallacious test, it would be a strained construction of the law to substitute a test which was not within the legislative contemplation at the time the act was passed, because thereby we would substitute an entirely different classification than that which Congress intended at the time of the amendment. Well, then, the question arises, granting that the color criterion is the only one which the act of Congress recognizes, how is it to be determined in the practical application of the act whether a given importation of sugar is of the color of the number corresponding in color with the sample
78 of the Dutch standard? Why, ordinarily, it is to be determined as merchants determine—by a comparison of the article offered for importation with the Dutch standard. But it may occur that the sugar which is offered for importation while apparently of one color is really of a different color. That is to say, that after the product has become the sugar of commerce, and its color has become fixed, and its

characteristics established, for the purpose of evading laws imposing duties it may have been artificially colored. It seems to me, in such a case, it is competent for the officers of the government to examine the sugar and determine whether the color which it presents to the eye after comparison with the Dutch standard is the real color or a spurious one; and, although I am not entirely clear that the proper construction of the act of Congress does not require me to hold that the officers of the government can make no test but that afforded by the act, yet, entertaining some doubt upon that subject, I propose to resolve that doubt in such a way as will best protect the equities of the government, and at the same time do no wrong to the equities of the importer. And so
79 I rule that it is competent for the defendant in this case to show that the sugar imported does not present its natural color. That is to say, that after it became the sugar of commerce it was artificially colored so that the test would be between the true color of the various grades and the color of the Dutch standard.

But I am unable to sanction the position which has been taken on the part of the defence in this case:

That the government can go further than that, and show that during the process of manufacture ingredients were put into the sugar for the purpose of imparting an unnatural color.

The duty is imposed upon sugar of commerce. The test by which it is to be classified is to be applied to the production which has become the sugar of commerce. The manufacturer may make his sugar as he chooses, but for the purposes of this act, imposing duties after it is made, he has no right for the purpose of importing it into this country to disguise the real color which it acquired when it became the manufactured product.

I don't know that it is necessary at this stage of the trial of the
80 case to express my views more extensively. I think I have already said enough to indicate what my rulings would be upon the various issues which are to be presented, and I trust that counsel will confine their evidence to such questions as, under the ruling I have made, will be competent and pertinent.

(The counsel for the defendant then duly excepted to the ruling of the court.)

DEF'T'S COUNSEL. I will ask a few questions which may be outside of your honor's ruling for the purpose of obtaining exceptions.

On behalf of the defendants Professor PETER COLLIER was called to testify:

He testified that he was chemist in charge in the Department of Agriculture at Washington, and had been in that position for three and one-half years; that he was familiar with vacuum-pan sugars made from sugar-cane, and that assuming that the surface color of the samples in suit was burnt molasses, he had no doubt whatever that it was produced in the vacuum-pan after the crystals of sugar were found.

The COURT. You say assuming what about burnt molasses?

COUNSEL FOR DEFENDANT. My question assumed that burnt
81 molasses was the coloring matter.

COUNSEL FOR PLAINTIFF. We object to that. It should be shown first that burnt molasses was the coloring matter.

The COURT. I will permit the question to be asked. He says that the color may be imparted in several ways. I assume one of these

ways to be by introducing burnt molasses with the sugar. (To the witness.) Is that so?

The WITNESS. Either introducing it or burning it in the pan.

By the COURT: Burning the sugar?

A. No. The molasses may be burnt in the pan and in that way produced color in the pan.

By PLAINTIFF'S COUNSEL. Let me see if I understand you. The molasses which is made while the boiling is going on may, by raising the heat, be burned during the process in the pan?

A. Yes, sir.

This witness was asked the following questions by defendant's counsel:

Look at the samples before you (being samples of the sugar in suit) and state whether they have a sugar color.

(To this question counsel for plaintiffs objected; which objection was sustained by the court and the question was excluded; to which
82 ruling of the court counsel for defendant then and there excepted; which exception was then and there noted and allowed by the court.)

This witness further testified that in sugar produced by the vacuum-pan process ordinarily the crystal is nearly white; that is, they are almost white, and almost pure crystallizable sugar. I beg to make this amendment to my answer. I have examined a large number of vacuum-pan centrifugal sugars concerning which this answer would not apply, but it is one of those which are made in accordance with the half-dozen methods that have been referred to. Of course what I have said does not apply to those what I understand to be colored sugar, but, with the exception of those sugars, the vacuum-pan centrifugal is one of the very highest grade in color and the very highest is saccharine strength, and that is the natural color of pure sugar. And witness also testified that the samples were artificially colored, and by the use of the term artificial color he testified that he meant sugar which had a color which does not belong to it by any natural process of manufacture; and further, that the vacuum-pan was introduced about forty years ago
83 for the purpose of producing the largest amount of crystallizable sugar with lighter color, and that the color of the Dutch standard are natural colors belonging to raw sugar.

Being cross-examined by plaintiff's counsel, the witness testified:

Molasses is a technical product varying in composition, but it is that portion of the evaporated juice of the sugar-cane or other saccharine juices which is not obtained in the form of crystallizable sugar. It is more or less darkened in its color by heat in the process of its manufacture in every process that I know of. It is always and inevitably produced in the process of the manufacture of cane-juice to obtain from it crystallized sugar.

If the sugar is obtained, molasses is obtained as a necessary concomitant product. I have never been in Cuba. I have never witnessed the manufacture of sugar from cane-juice on a large scale or in any foreign country. I got the centrifugal sugar in regard to which I testified, which were between 18 and 20 in color, from the custom-house from some revenue officer. Some of them had been washed.
84 By washing I understand that in the process of purging what is taken from the vacuum-pan it passes into the mixer and from there into the centrifugal, and there the molasses is thrown out of it. There still remains, however, adhering to the sugar a greater or less

quantity of molasses. To remove that and increase the color a spray of water is thrown upon it, and that is what I understand by washing. That washing removes the coloring matter, to some extent, which necessarily adheres to the surface of the crystal. That operation increases the percentage of crystallizable sugar in the mass, and increases the color according to the Dutch standard; that is, makes it whiter, and the result is a less weight of sugar than before the washing. Assuming that a manufacturer of sugar should endeavor to make it of a dark color in the vacuum-pan by processes applied there or before it reaches the vacuum-pan, the sugar would not necessarily all be of the same color. The product after being purged might vary in color three
85 numbers by the Dutch standard. I have never seen Dutch standard bottles lower than No. 7. I have seen sugars darker than No. 7. In sugar produced by the vacuum-pan process, ordinarily the crystal is nearly white. The natural color of the pure crystal is nearly white, and the appearance this sugar presents to the eye is determined largely by the substances that adhere to the crystals, and that are in the interstices between the grains of sugar—substances which are exterior to the crystal. The tendency of crystallization is to purify by elimination of all things which are not known as isomorphous with the substances which is crystallizing. If we had a substance present which could crystallize in the same form as sugar, it would not be eliminated. It frequently happens that the elimination will not be perfect, but a portion of the coloring matter is taken up in the body of the crystal; but my observation is that the great majority of crystals of sugar are white through their substance except where some dirt is included in the crystal as a nucleus around which it is formed. When sugar comes from the vacuum-pan it often goes
86 first into coolers, then it goes into the mixer. The mixer is a horizontal shaft with projecting arms turning in a trough into which the stuff is conducted and the arms mix up thoroughly the crystals of sugar with the molasses, so that it may purge more easily. When it is too stiff for purging they put in molasses. In many instances this is a necessary process. From the mixer it passes into the centrifugal machine. After they have purged the molasses as completely as possible if they want to produce a light sugar they spray water over it in the centrifugal machine, and if they do not want light sugar omit the water. In what I understand to be the ordinary process of manufacture, if the mass in the mixer is at all stiff they must add molasses to it in order to purge it in the centrifugal machine in the operation that constitutes one of the six methods which I understand is pursued in manufacturing these sugars.

Q. As to the sugars in the small bottles, do you see any evidence there that would lead you to believe that they were colored?

A. Yes, sir.

87 Q. By burnt molasses?

A. Well, I couldn't tell that; but that they are colored I have no doubt. Of course I couldn't tell whether it was molasses; it might be by half a dozen other things. I couldn't tell without examination chemically, which I have not made; but I have no doubt they belong to what are known as artificially-colored sugar.

Q. What do you mean by artificially colored?

A. I mean sugars which have a color which does not belong to it by any natural process of manufacture.

Q. What do you mean by natural process of manufacture?

A. I mean a process of manufacture which has been adopted be-

cause it gives, after centuries of experience, the best-known results and the sugar so made will have a certain color. Of course the processes were improved, and the introduction of the vacuum-pan was for the express purpose of diminishing its color—not to greatly increase the quantity of sugar produced, but to increase the quality of it

88 By the COURT:

Q. When was the vacuum-pan introduced?

A. First introduced into Cuba about 1847.

PLAINIFFS' COUNSEL:

Q. And when were centrifugal machines introduced?

A. First introduced into Cuba about 1848. Large numbers of vacuum-pans and centrifugal machines were introduced into this country about 1860.

Q. What do you mean by the "best results"? Were you speaking of the best results commercially or scientifically?

A. What I aim at is as large a quantity of sugar as is possible of a good hard grain and light color that can be put upon the market and consumed, and it was for that purpose that the vacuum-pan was contrived.

Q. Then, in your opinion, any sugar that is produced of a dark color, when it might have been made of a light color, is not a natural-process sugar?

A. If a person departs from well-established usage which gives a first-rate result, I say that departure from the routine method is, if it influences the product, as in this case it does, an artificial process.

Q. Then your idea of an artificial color is, that it is one when
89 the process was such as not to produce what you regard as desirable to attain the best results?

A. If you will let me explain.

The COURT. No; that is a fair question.

A. Not at all; but it is when the natural process of manufacture is departed from; I don't care as to the character.

By the COURT:

Q. The substance of it is, that it is artificially colored, where the ordinary process of manufacture is departed from, with a view to impart color?

A. Yes, sir; that is my view of it; in the case if lime is used for a specific purpose.

By the COURT:

Q. Has it not always been sought, in sugar manufacturing, to make the sugar of as light a color as possible?

A. Until very recently, yes.

Q. (By plaintiffs' counsel.) And have improvements been made from time to time in the manufacture of sugar, so that the same amount of saccharine matter in a given quantity is represented by a lighter colored product?

A. It is barely possible that is the case.

Being further cross-examined, witness said:

Manufacturers have changed their methods, and those improved methods have given them lighter sugars. A great change was made by the introduction of the centrifugal machine. There had been improvements from time to time in well-known long-continued processes, and these improvements have involved changes in the detail of the

States generally bought and sold with reference to the Dutch standard in color?

(To this question counsel for plaintiffs objected, which objection was sustained by the court, and to this ruling of the court counsel for defendant then and there excepted; which exception was then and there noted and allowed by the court.)

This witness further testified that on December 22nd, 1870, and prior thereto, sugars were generally recognized to be included in three subdivisions, namely, clayed sugar, muscavado sugar, and centrifugal sugars. That clayed sugars were boiled in open pans, purged in moulds, with clay on top; water passing through the moulds drives the molasses to the bottom, and the upper part would be white, and be grad-
97 ually darker to the bottom. The color is produced by the impurities boiled with the sugar.

When the cane is crushed it crushes up the fibre, and there is a mucous in that fibre that comes in with the juice, and if it is not taken out it makes it a dark color. One sugar is darker than other by the greater amount of impurities in it.

Muscavado sugars were, at the same time, sugars boiled in open pans and purged in the hogshead or cooler; that is, purged naturally in the hogshead, the molasses leaving the sugars gradually by gravitation.

The witness was also asked the following questions by defendant's counsel:

Q. On December 22nd, 1870, and prior thereto, were the sugars of commerce colored by artificial process, or did they all have natural colors?

(To this question counsel for plaintiffs objected, which objection was sustained by the court, and to this ruling of the court defendant's counsel then and there excepted; which exception was then and there noted and allowed by the court.)

And witness was also asked the following questions by defendant's counsel:

98 Q. The samples before you, being the exhibits in this suit, have they a natural or an artificial color?

(To this question plaintiffs' counsel objected, which objection was sustained by the court, and to this ruling of the court defendant's counsel then and there excepted; which exception was then and there noted and allowed by the court.)

On behalf of the defendant, GIDEON E. MOORE was called as a witness.

He testified that he was an analytical and consulting chemist for twenty-two years, and that he practically and theoretically familiar with the chemistry of sugars, and was familiar with the method of manufacturing sugars from cane juice, and was also familiar with the history of the Dutch color standard. It is very simple. I cannot do better than to read to you an account of the history of the system as given in a standard work. It is by Richard Von Kaufman. In the English the work is called The Sugar Industry in its Economical & Fiscal Relation; a contribution for the explanation of the sugar tariff and taxation by the government; by Richard Von Kaufman, doctor of jurisprudence, Berlin; published by Guttetag, 1878. The
99 Dutch standard in color is the same in this country as in Europe.

The passage in question is on page 82: "The oldest method for the determination of the value of sugar was the classification of the

same according to types and categories, a method which France was the first to adopt. It derived it from the custom first introduced into Holland in the trade in colonial sugar. (Sugar from the Dutch colonies, Java, &c.) This valuation of colonial sugars by the so-called type standard descends to us from a time when the science of saccharaniety lacked the present optical aid, and when only sugar of tropical origin was under consideration. The necessity was experienced even at that period of laying down a certain normal sample in buying large quantities of sugar. The Dutch commercial agents and brokers came to a mutual understanding, and mixed samples of the Indian sugars dealt in in the markets of Holland, of which the best, which was designated as No. 20, represented almost a pure sugar, which was dry or sharply crystallized, and had a grayish white color, while the lowest
100 number was an average of the darkest brown sugar. The lowest sort, not occurring in commerce, is designated as number 6, and represents a soft brown sugar, rich in syrup. The numbers lying between Nos. 20 and 6 are successive transitions between the two extremes."

The Dutch color standard, as described in this extract, is therefore simply a measure of determining the value of sugar by reference to the color, which varies according to the proportion of molasses that the sugar contains, the pure sugar being in color lighter, and therefore higher in grade, higher in commercial value.

The witness was shown certain sugars, which were identical with two of the samples of sugars which were exhibits at the trial, and he testified that he had analyzed them; that on washing one of them with a little water he found the grain of the sugar to be very white, and it is evident that the whole sample was made by the same process of manufacture, that is, does not consist of a mixture of different kinds of sugar, and the color was produced subsequent to the formation of the grain. The other sample consists of two different kinds of sugar.
101 One has a grain nearly colorless, the other is dark-colored in the grain. In the one that is dark colored in the grain, the coloration was effected as follows: The custom is to boil until the grain is formed and then supply fresh syrups, when successive depositions of sugar are made on the grains until they are become of a large size. The operation is continued from time to time until the pan is full of sugar crystals. The dark section of the crystal shows that the first grain was made of a very high-colored solution. It shows that when the grain was formed the contents of the vacuum-pan suddenly became dark; that there was then a second deposition of sugar from a comparatively lighter solution, and then a deposition of sugar from a very dark solution. For instance, this effect would have been produced if half the grains had first been formed and the vacuum-pan partially emptied, but before emptying the vacuum-pan a very dark coloring matter had been introduced or caused to form there; on discharging the contents of the pan or trough, a cer-
102 tain increase in the size of the crystals would take place in consequence of the cooling. On the addition of a lighter-colored solution and continued evaporation those first grains would receive a second coating of lighter-colored sugar, and this cooling would continue until the contents of the pan were again darkened, when an external dark color would be produced. I have tested the coloring matter and do not find that it gives distinctive reaction which would enable me to characterise it and distinguish it from a caramel of burnt

molasses, and that I found the contents of both samples to be crystallized sugars of a lighter degree of purity, surrounded by a very dark coating which was imparted to it after manufacture in the vacuum-pan before the strike. The witness was shown the samples of sugars in suit and asked the following question, by defendant's counsel:

Q. Is the color that the samples in suit show a necessary consequence of the manufacture of vacuum pan sugar? To this question counsel for plaintiff objected, which objection was sustained by
103 the court, and to this ruling of the court defendant's counsel then and there duly excepted, which exception was then and there duly noted and allowed by the court.

Being cross-examined, the witness said:

I did not state how much the weight of No. 19 was reduced by washing. I did not weigh the quantity before and after experimenting. The color was produced in the vacuum-pan. I mean by after manufacture, after the first crystallization in the vacuum-pan. The grains of sugar in the Dutch standard are whole grains without pulverization, as far as I know. I never made sugar or dealt commercially with sugar colored entirely through the grains; that indicates that it was colored before or during the process of crystallization.

Thereupon the defendant rested his case; and the case being closed on the part of both parties, the defendant requested the court to charge the jury as follows:

First. The defendant asks the court to charge that if the jury shall find from the evidence that the true color of the sugar, in suit, as as-
104 certained by comparing them in every respect with the standard selected by the Secretary of the Treasury and actually used in ascertaining and determining their dutiable character, was not sugar "not above number seven Dutch standard in color" they shall find a verdict for the defendant.

The court then and there refused to charge as so directed, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Second. The defendant requested the court to charge the jury that if they shall find from the evidence that on December 22nd, 1870, and prior thereto, the sugars of commerce were comprised substantially of crystallized sugar and molasses and that the color of the different grades of such sugar was produced by molasses, the highest grades being No. 20, Dutch standard in color, having no molasses in them, and the lower grades being 16, 13, 10, and 7 Dutch standard in color, having molasses in them, each of the lower grades having more
105 molasses than the other, so that the greatest quantity of molasses was contained in the lowest grades;

And if the jury shall also find from the evidence that the sugars in suit were not generally known as the sugars of commerce in December 22nd, 1870, and prior thereto, and that their color at the time of importation was not produced by molasses, but was produced by the introduction of some foreign substance after the sugars were made for the purpose of giving to them a color darker than their true color;

And if the jury shall also find from the evidence that the true color of said sugars is different from its apparent color, and that the true color of said sugars at the time of their importation was above No. 7, Dutch standard in color, they shall find a verdict for the defendant.

The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed.

106 Third. The defendant asks the court to submit to the jury the question of fact as to the point of time when the sugars in suit were manufactured, and if the jury shall find that the sugars were colored with burnt molasses and were manufactured prior to the time when the burnt molasses was introduced into the vacuum-pan, and that the same was so introduced into the pan merely for the purpose of producing a dark surface-color upon the sugars so that the sugars, the true color of which was above number seven, Dutch standard in color, appeared to the eye by comparison with the Dutch standard in color to be sugars not above No. 7, Dutch standard in color, and shall also find that the true color of the sugar when it became manufactured was above number seven, Dutch standand in color, they shall find a verdict for the defendant.

The court declined so to charge, and ruled there was no evidence to submit to the jury tending to show that the color was not imparted to the sugar during the process of manufacture.

107 Fourth. The defendant requests the court to charge: If the jury shall find from the evidence that the Dutch standard consists of sugars in which the color indicates the grade of the sugar, and shall also find that the color of the samples in suit does not indicate at all the grades of the sugar, but that the sugars in suit are in fact of a high grade, say number 16 as indicated by the Dutch standard, but have a surface-color of the lowest grade, say not above No. 7, Dutch standard in color, which surface-color was imparted to it after the crystals of sugar were found in the vacuum-pan at a time when the boiling of the sugar was completed, they shall find a verdict for the defendant.

The court then and there refused to charge, as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Fifth. The defendant asks the court to charge that the surface or external color of the sugars in suit was not necessarily the

108 color by which their dutiable character was to be ascertained, but the true color of the sugars in suit, as ascertained by comparison with the standard which was in use by the collector and was actually used for the purpose of ascertaining the dutiable character of the sugars in suit, was the color to guide him in ascertaining and levying duties upon them.

The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Sixth. The defendant asks the court to charge that if the jury shall find from the evidence that the surface or external color of the sugars in suit was produced by the introduction of a foreign substance at a time subsequent to the manufacture of sugar, and shall also find from the eivdence that when said foreign substance is removed from the surface of said sugars that they have not a color of sugars not above No. 7, Dutch standard in color, but do have a color of sugars above No. 7, Dutch standard in color, they shall find a verdict for defendant.

109 The court declined so to charge, and ruled there was no evidence to submit to the jury tending to show that the color was not imparted to the sugar during the process of manufacture.

Seventh. The defendant asks the court to charge that for tariff pur-

poses centrifugal sugars are required to have a color obtained by the process of manufacture without the introduction of any foreign substance in the process of manufacture for the purpose only of obtaining a darker color than that which the sugars would have obtained in the natural process of manufacture.

The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Eighth. The defendant asks the court to charge that if the jury shall find from the evidence that a foreign substance was introduced into the sugars in suit during the process of the manufacture which made them darker in color than they would have been but for the introduction of such foreign substance, and shall also find from the evi-
110 dence that but for the introduction of said foreign substance the apparent color of the sugars in suit would not have been that of sugars not above No. 7, Dutch standard in color, but would have been of a higher grade, they shall find a verdict for the defendant. The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Ninth. The defendant asks the court to charge that the jury may examine the samples of the sugars in suit, and themselves compare them with the sugars of the Dutch standard; and that if the jury find as a matter of fact that the sugars in suit are not of the color of any of the color of the Dutch standard, they may find as a matter of fact whether the defendant erred in his classification.

And that if they find the collector did classify the sugars in suit according to their true color from the best means in his control, they may find for the defendant.

111 The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Tenth. That sugar is above No. 7, Dutch standard in color, within the intent of the statute if it be above that number when reduced mechanically to the same fineness and packed in the same manner as such standard.

The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

Eleventh. The defendant asks the court to charge that sugar composed of crystals larger than those of the standards furnished by the Secretary of the Treasury may properly be reduced to the same fineness as those of such standards, and packed in bottles in the same manner for comparison with such standards, in order to determine the color or classification.

112 The court then and there refused to charge as so requested, and counsel for defendant then and there duly excepted to the ruling of the court; which exception was then and there duly noted and allowed by the court.

And thereafter, and before the issues were submitted to the jury, counsel for plaintiffs made a motion to the court to direct the jury to find a verdict in favor of the plaintiffs and against the defendant for

the sum of $5,267.53, and the court then and there refused to charge the jury as requested by counsel for the defendant, and refused to submit any question of fact to the jury, but directed the jury to find a verdict in favor of plaintiffs and against the defendant for the sum of $5,267.53, and the counsel for defendant then and there excepted to each and every of the rulings of the court; which exceptions were then and there noted and allowed by the court.

And thereafter a verdict was rendered in accordance with the aforesaid direction of the court in favor of the plaintiffs against the
113 defendant for the sum of $5,267.53. And inasmuch as the said several rulings of the court, and the said several exceptions thereto, as hereinbefore stated, do not appear by the record of said trial in the judgment record, therefore on the prayer of the defendant the foregoing has been allowed and settled and signed this 21st day of May, 1881, at the April term of said court aforesaid, and directed to be filed as and for the bill of exceptions in this case.

WM. J. WALLACE,
District Judge.

(Endorsed:) U. S. circuit court, southern district of New York. Samuel Welsh & al., vs. Edwin A. Merritt. Defendant's bill of exceptions. S. L. Woodford, U. S. attorney, att'y for def't. U. S. circuit court. Filed Oct. 4th, 1881. Joseph M. Deuel, clerk.

114 Supreme Court of the United States.

EDWIN A. MERRITT, PLAINTIFF IN ERROR,
versus
SAMUEL WELSH, JOHN WELSH, JOHN WELSH, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, defendants in error. } 6140. Assignment of error.

Afterwards, to wit, on the third Monday of the term commencing on the second Monday of October, before the justices of the said court, at the Capitol in Washington, comes the said plaintiff in error, by S. L. Woodford, his attorney, and says that in the record and proceedings aforesaid there is manifest error in this, to wit, that by the record aforesaid it appears that the judgment aforesaid, in form aforesaid given, was given for the said defendants in error against the said plaintiff
115 in error, whereas by the law of the land the said judgment ought to have been given for the said plaintiff against the said defendants. And the said plaintiff prays that the judgment aforesaid, for the error aforesaid, and other errors in the record and proceedings aforesaid, may be reversed, annulled, and altogether held for nothing, and that he, the said plaintiff, may be restored to all things which he has lost by occasion of said judgment, &c., &c., &c.

S. L. WOODFORD,
Attorney for Plaintiff in Error.

(Endorsed:) 6140. U. S. Supreme Court. Edwin A. Merritt, plaintiff in error, versus Samuel Welsh et al., defendants in error. Assignment of error. Stewart L. Woodford, United States attorney, attorney for plaintiff in error.

116 Due service of a copy of the within is hereby admitted.
New York, October 5th, 1881.

STANLEY & CLARKE,
Attorneys for Defendants in Error.

To STANLEY & CLARKE,
Attorneys for Defendants in Error.

U. S. circuit court. Filed Oct. 5, 1881. Joseph M. Deuel, clerk.

117 *Joinder in error.*

Supreme Court of the United States.

EDWIN A. MERRITT, PL'FF IN ERROR,
against
SAMUEL WELSH, JOHN WELSH, JOHN WELSH, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, def'ts in error.

And afterwards, to wit, on the third Monday of October term, in the year of our Lord one thousand eight hundred and eighty-one, the said Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins, by Stanley & Clarke, their attorneys, freely come here into court and say that there is no error, either in the record or proceedings aforesaid, or in the giving of the judgment aforesaid; and they pray that the said Supreme Court of judicature, before the justices thereof now here, may proceed to examine as well
118 the record and proceedings aforesaid as the matters aforesaid above assigned for error, and that the judgment aforesaid, in form aforesaid given, may be in all things affirmed.

STANLEY & CLARKE,
Att'ys for Def'ts in Error.

(Endorsed:) U. S. Supreme Court. 6140. Edwin A. Merritt, pl'ff in error, against Samuel Welsh et al., def'ts in error. Joinder in error. Stanley & Clarke, att'ys for def'ts in error, 158 Broadway, N. Y. City.

Due service of a copy of the within joinder in error is hereby admitted this 6th day of October, 1881.
119 S. L. WOODFORD,
Attorney for the Plaintiff in Error.

U. S. circuit court. Filed Oct. 6, 1881. Joseph M. Deuel, clerk.

120 UNITED STATES OF AMERICA, *ss:*

To Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, & Benjamin Perkins, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at Washington on the third Monday of the term commencing on the second Monday of October, eighteen hundred and eighty-one, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the southern district of New York, wherein Edwin A. Merritt is plaintiff in error, and you are defendants in error, to show cause, if any there be, why the judgment in the said writ of error mentioned should not be corrected, and speedy justice should not be done to the parties in that behalf.

Dated October 4, 1881.

ADDISON BROWN, *U. S. D. J.*

(Endorsed:) 6140. Eq. A. 3481. U. S. Supreme Court. Edwin A. Merritt, plaintiff in error, against Samuel Welsh & al., defendants in error. Citation. S. L. Woodford, attorney for plaintiff in error.

Due service of a copy of the within citation is hereby admitted this 5 day of October, 1881.

STANLEY & CLARKE,
Attorneys for Defendants in Error.

(Indorsement on cover:) No. 1066. Edwin A. Merritt, collector of the port of New York, plaintiff in error, vs. Samuel Welsh, John Welsh, John Welsh, jr., Osgood Welsh, John L. Welsh, and Benjamin Perkins. S. New York C. C. U. S. Filed October 15, 1881.

Merritt v. Welsh (with folds. brief)

Supreme Court of the United States.

STATEMENT

No 1066

RELATIVE TO THE

ARTIFICIAL COLORING

OF

IMPORTED SUGARS.

PREPARED BY

DR. GIDEON E. MOORE.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1881.

STATEMENT

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1881.

Treasury Department,
Document No. 223.
Secretary—Customs.

STATEMENT.

The controversy between the Secretary of the Treasury and the importers of sugar, relative to the classification of this article for the appraisement of duty, which, commencing at an early period during the administration of President Hayes, has culminated in the suits now pending against the government for the recovery of the extra duties paid by importers under the operation of the orders of the Secretary of the Treasury directing the use of the polariscope in the classification of sugars by the Dutch standard, rests essentially on three questions, viz:

1st. At what stage of the operation of sugar-making does sugar begin to exist as an article of commerce, and more especially as an article subject, under the tariff laws of the United States, to classification for the appraisement of duty?

2d. What is the nature of the operation of classifying imported sugars by the so-called "Dutch standard" as provided by the said tariff laws, and what is the nature of the Dutch standard as a basis for such classification.

3d. What is the nature and extent of the discretionary power with which, as an executive officer of the Government of the United States, the Secretary of the Treasury is invested in the matter of the choice of means by which the laws relating to the classification of sugars for the purpose of appraisement shall be put in execution or enforced?

POSITION OF THE IMPORTERS.

It is contended on the part of the importers:

1st. That the Dutch standard, as an instrument for the classification of sugars for appraisement, is purely and simply a standard of *color*, a measure of the shade or degree of color that sugars show to the unaided eye.

2d. That the statute prescribes a specific duty for each shade of color, irrespective of any relation that this shade of color may possess to the intrinsic quality or value of the sugar.

3d. That the Secretary of the Treasury is bound by the terms of the statute to apply the Dutch standard solely by comparing the external or visible color of the series of samples of sugar known as the "Dutch standard" with the external or visible color of the sugar under appraisement, and that he shall decide from this simple visual inspection what is the true classification of the said sugar, without reference to any consideration of intrinsic quality or grade, or, in short, to any other property than the shade of color that the said sugar may possess, and without reference to any property or intrinsic quality possessed by

the samples of sugar known as the Dutch standard other than the shade of color they may show to the unaided eye, and without regard to the way or manner in which such color has been communicated or produced.

They furthermore contend, in effect:

4th. That the Secretary of the Treasury is empowered by law solely to select the standard by which the *color* of sugars is to be regulated; that he is not empowered to select the standard by which the *grade* of sugars is to be regulated, and, that while he is enjoined by the statutes of the United States (R. S., Title XXXIV, sec. 2915) to "*prescribe and require that samples from packages of sugar shall be taken by the proper officers in such manner as to ascertain the true quality of such sugar*" he is not empowered to use any standard by which this "true quality" or *grade* shall be regulated, but that having required this sample representing the true *quality* to be taken, he shall use it solely to ascertain the shade of color irrespective of the *true quality* or grade.

5th. That in failing to adopt this interpretation of the statutes the Secretary of the Treasury has arbitrarily increased the duties on sugars beyond the limits prescribed by the statutes, and that he has therefore exceeded the functions of an executive officer of the government, and has usurped functions vested by the Constitution of the United States solely in the national legislature.

6th. That the maker of a sugar has the right to make it of any color he pleases, and that the color so communicated is the sole measure for the classification of the sugar as an article subject to classification by the "Dutch standard."

7th. That under the ruling of the court in the "California case" (United States vs. Cargo of Sugar, 3 *Sawyer's Reports*, 46) sugar is not manufactured until it has passed out of the hands of the manufacturer and into those of the importer or merchant.

8th. That previous to manufacture, as so defined, the color that the sugar receives, no matter how communicated, is the sole property that can be made the basis for classification by the "Dutch standard" as provided by the statute.

9th. That the sugars called "dark centrifugals," and which have been the subject of the recent suits in Baltimore and New York, are produced by a new process of manufacture which furnishes a product the saccharine strength of which bears no relation to the external or visible color.

10th. That the said "dark centrifugals" shall be classified for appraisement by simply comparing the external or visible color with the external or visible color of the series of samples of sugar known as the Dutch standard, and without any reference to the quality or grade of the sample under appraisement or of the standard samples.

POSITION OF THE GOVERNMENT.

On the part of the government it is contended:

1st. That the "Dutch standard," as shown by its history, its employment as a basis for the valuation of sugars for commercial transactions, and its original and first employment under the tariff laws of the United States as a means of ascertaining the degree of refinement or concentration of saccharine strength "by claying, boiling, clarifying, or other process" or degree of advance "beyond the raw state" (12 U. S. Statutes at Large, 292), is essentially a measure of saccharine strength and not of color as an abstract physical attribute of matter; the term

"color" being entirely omitted from the act of August 5, 1861, wherein the Dutch standard is first directed to be used in the classification of sugars.

2d. That in the act of July 14, 1862 (12 U. S. Statutes at Large, 543), in which the "Dutch standard" is for the first time in the tariff legislation of the United States termed "The Dutch standard in color," the term is used in the same sense in which it was used in the act of August 5, 1861, that is to say, as a measure of quality or saccharine strength, the processes described in the act of August 5, 1861, as "claying, boiling, clarifying, or other processes" being all of them processes of concentration or advancement of the saccharine strength of the product; and that there is not a single instance in the tariff laws of the United States wherein the term color is used alone in the sense of a standard for classification, but that in every instance the words "Dutch standard in color" or their equivalent are used, which is furthermore a distinct recognition of the technical character of the "Dutch standard" as a standard for classification.

3d. That in all of the tariff acts subsequent to the act of August 5, 1861, and down to the present day, the Dutch standard, where directed to be used, is directed to be used in the same sense as that in which it was directed to be used in the act of August 5, 1861, wherein the Dutch standard was first directed to be used as a standard for classification for appraisement.

4th. That the technical character with which the term "Dutch standard" was invested by the act of August 5, 1861, and which has not been modified or repealed by subsequent legislation, virtually restricts the indication of color as a means of comparison with the Dutch standard to that species of color which bears a definite relation to the saccharine strength of the sugar, and can hence serve as a measure of the saccharine strength, or, what is the same thing, advance beyond the raw state, and that that species of color alone can be held to be entitled to be considered the *true color by the Dutch standard* within the meaning of the statutes.

5th. That when the external or visible color of a sample of sugar does not bear any definite relation to its advance beyond the raw state by claying, boiling, &c., it cannot be used as a means of comparison with the samples of sugar known as the Dutch standard for the purposes of classification, under the terms of the act of August 5, 1861, or hence also of any subsequent act, to the present day, and that it is not the true color by the Dutch standard.

6th. That under the terms of section 2914, Title XXXIV, of the Revised Statutes, the Secretary of the Treasury is authorized to select the standard by which the color *and grades* of sugar are to be regulated in such a manner as he may deem expedient; and that he is furthermore enjoined (R. S., Title XXXIV, sec. 2915) to "prescribe and require that samples shall be taken from packages of sugar in such a manner as to ascertain the *true quality* of such sugar."

7th. That the true quality of a very large class of imported sugars cannot be ascertained by simple inspection of the external or visible color, for the reason that this color has largely been produced by intentional manipulation outside of the operations of manufacture that are essential to the production of sugar from the juice of the sugar-cane, and that the true color by the Dutch standard, or that color that bears a definite relation to the saccharine strength or quality and to the advance beyond the raw state, cannot be determined by mere visual inspection of the external color and comparison with the color of the

samples of sugar constituting the Dutch standard; that the true color of these sugars is therefore covered or concealed by the superimposition of other color, and cannot be determined by the standard when applied by mere visual inspection and comparison.

8th. That the effect of this disturbance of the relation between the quality or saccharine strength and the external or visible color, which exists in the case of all sugars to which the Dutch standard can be applied by the comparison of the external or visible color, has been to destroy the character of the said sugar as an article subject to classification by the Dutch standard, and to remove it from the list of sugars enumerated in Schedule G of the revised tariff.

9th. That as a non-enumerated article of commerce such sugar falls under the provisions of section 2499, Title XXXIII, of the Revised Statutes, which reads:

> There shall be levied, collected, and paid, on each and every non-enumerated article which bears a similitude, either in material, quality, texture, or the use to which it may be applied, to any article enumerated in this title as chargeable with duty, the same rate of duty which is levied and charged on the enumerated article which it most resembles in any of the particulars before mentioned; and if any non-enumerated article equally resembles two or more enumerated articles, on which different rates of duty are chargeable, there shall be levied, collected, and paid, on such non-enumerated article, the same rate of duty as is chargeable on the article which it most resembles paying the highest duty; and on all articles manufactured from two or more materials, the duty shall be assessed at the highest rates at which any of its component parts may be chargeable.

10th. That the attributes of such sugar as a non-enumerated article are:

(1.) Material: A mixture of pure sugar and molasses;
(2.) Quality: Saccharine strength or percentage in pure sugar;
(3.) Texture:
(4.) Application: Material for the production of refined sugar;

and that in the attributes of material, quality, and use to which it may be applied such sugar presents the greatest similitude to raw or unrefined sugar in general.

11th. That the determination of the *class* of raw sugars which the said sugar most resembles cannot be effected by the direct comparison of the external color with the external color of sugars of the several classes enumerated in Schedule G of the revised tariff, or of the Dutch standard, for the reason that this external color bears no relation to the advance beyond the raw state of the sugar in question, and hence cannot be used for the determination of quality or *grade*.

12th. That the comparison of the *quality* of these non-enumerated sugars with that of the several classes of raw sugars can only be effected by the direct determination of the percentage of sugar they contain, that is to say, pure sugar, and comparison of this percentage with the percentage of pure sugar contained in sugars of each of the different classes enumerated in Schedule G of the revised tariff, for the purpose of ascertaining which of these classes of sugars they most resemble in quality.

13th. That in the exercise of the discretion with which he is invested by section 2914, Title XXXIV, of the Revised Statutes, the Secretary of the Treasury has selected, as the standard by which the *grade* of these sugars shall be regulated, the relation of the quality or saccharine strength which they possess to the quality or saccharine strength of the samples of sugar known as the Dutch standard, and which are directed by the tariff laws of the United States to be employed as the measure for comparison in the matter of advance beyond the raw state

by operations of concentration of saccharine strength; and that, as the instrument for the determination of the degree of the said saccharine strength, the Secretary of the Treasury has, with the advice and indorsement of the highest scientific authority in the land, viz, the National Academy of Sciences, selected as being the most exact and reliable the instrument known as the *polariscope*, which is furthermore the instrument in general use in this country for the determination of the saccharine strength as a basis for commercial transactions in unrefined sugars.

14th. That the exercise of this discretion has been rendered obligatory on the Secretary of the Treasury from the fact that the laws of the United States do not contain specific provisions and directions as to the manner in which the standard shall be selected, but, on the contrary, leave the selection to his discretion, and for the reason that the statutes (R. S., Title XXXIV, sec. 2949) direct that—

> The Secretary of the Treasury, from time to time, shall establish such rules and regulations, not inconsistent with the laws of the United States, to secure a just, faithful, and impartial appraisal of all merchandise imported into the United States. * * *

15th. That the order of the Secretary of the Treasury dated July 19, 1879, as modified by the order dated September 2, 1879, has effected no change in the existing duties on sugars, nor has it substituted any other classification for the classification by the Dutch standard, but simply directs that the classification shall be effected by the only means by which the Dutch standard can be employed under the terms and within the meaning of the statute.

16th. That the proviso in section 3 of the act of March 3, 1875 (18 U. S. Statutes at Large, 339), directs that concrete or concentrated melado shall hereafter be classified as sugar dutiable according to color by the Dutch standard, the said concrete or concentrated melado being, as is well known, the juice of the sugar-cane concentrated by evaporation of its water until the sugar it contains crystallizes out or solidifies, and that, by the same proviso, melado, in contradistinction to concentrated melado or concrete, is defined as "an article made in the process of sugar-making, being cane-juice boiled down to the sugar point * * *."

That therefore this proviso virtually decides that the crystallization or solidification of the sugar invests it with the character of sugar as an article dutiable by the Dutch standard.

17th. That the operation of crystallization or solidification of the sugar terminates the manufacture of sugar as an article dutiable by the Dutch standard, and that the operation of darkening the color of sugar after crystallization yields a product that, when knowingly imported into the United States and offered for appraisement by the system of classification by the Dutch standard, renders the importer thereof liable to prosecution under the terms of section 12 of the act of June 22, 1874 (18 U. S. Statutes at Large, 186), which provides:

> That any owner, importer, consignee, agent, or other person, who shall, with intent to defraud the revenue, make, or attempt to make, any entry of imported merchandise by means of any fraudulent or false invoice, * * * or who shall be guilty of any willful act or omission by means of which the United States shall be deprived of the lawful duties, or any portion thereof, upon the merchandise, or any portion thereof, embraced or referred to in such invoice, * * * or affected by such act or omission, shall for each offense be fined in any sum not exceeding five thousand dollars nor less than fifty dollars, or be imprisoned for any time not exceeding two years, or both; and, in addition to such fine, such merchandise shall be forfeited. * * *

And this liability to punishment by fine, imprisonment, and forfeiture extends to all cases of this nature, independently of the method or

operation by means of which this darkening in color after crystallization was effected, inasmuch as the communication of such dark color after crystallization is not a necessary part of the operation of manufacturing sugar, having been effected subsequent to the completion of the manufacture of sugar as an article dutiable by the Dutch standard, and inasmuch as this darkening of the color has the effect of making the sugar, when its external or visible color is compared directly with that of the samples of sugar known as the Dutch standard, appear to be less advanced beyond the raw state, or, in other words, less concentrated in saccharine strength than it in fact is and would be shown to be by the comparison of its true color, or that which it would have shown had not the color been darkened, and that this darkening in color would, if the sugar be compared by its external color with the sugars of the Dutch standard, cause it to be assigned to a lower class than that to which it really belongs, that is to say, to a class less advanced beyond the raw state, and hence subject to a lower rate of duty.

18th. That inasmuch as the Dutch standard is a measure of the degree of advance beyond the raw state, or, in other words, of concentration of saccharine strength, directed by law to be employed in the classification of sugars for appraisement, the act of falsifying the indications of the said Dutch standard, howsoever or by what means, or at what period of the operation of manufacture it may be effected, removes the sugar on which it has been practiced from the class of raw sugars dutiable by the comparison of the external color with that of the sugars of the Dutch standard, for the reason that the external color does not bear any relation to the degree of advance beyond the raw state.

19th. That the order of the Secretary of the Treasury dated July 19, 1879, as modified by the order dated September 2, 1879, directs in effect that these sugars shall be discriminated from sugars of ordinary character by the comparison of the saccharine strength or advance beyond the raw state, as determined by the method of polarization, with the saccharine strength, as determined by the same method, of the samples of sugar known as the Dutch standard, and when by this comparison the sugar shall be shown to be devoid of that relation of saccharine strength to color which is characteristic of all sugars other than refined sugars within the meaning of the act of August 5, 1861, and, in default of a new definition of the meaning of the terms of the act of August 5, 1861, of all subsequent tariff acts, that these sugars, as a non-enumerated article, shall be classified with those sugars that are, under the tariff laws, subject to classification by the Dutch standard, and that this classification shall be effected by comparison of the *quality*, that is to say, the saccharine strength of these non-enumerated sugars with the *quality* or saccharine strength of the sugars of the Dutch standard.

20th. That the equity of the decision of the Secretary of the Treasury that these sugars shall be considered, for the purpose of appraisement, to be different from the sugars enumerated in Schedule G of the revised tariff, for the reason that the Dutch standard cannot be applied to them by the customary method of comparison of the external or visible color, and hence that the Dutch standard cannot be applied by the usual method for the purpose of ascertaining the degree of advance beyond the raw state, is virtually conceded by the importers of these sugars, inasmuch as in the suit at Baltimore, as well as in the suit at New York, the importers, through their counsel, have stated that these sugars are a new article of manufacture, differing from sugars made by

the processes hitherto in use in the fact that the external or visible color that they possess bears no definite relation to their intrinsic quality or grade, or saccharine strength, that is to say, to their advance beyond the raw state.

WHAT CONSTITUTES SUGAR AS A DUTIABLE ARTICLE.

The manufacture of sugar from the juice of the sugar-cane consists essentially in the concentration of the latter by evaporation of the water it contains until sufficient sugar separates or crystallizes out to impart to the mass a solid or semi-solid consistence. This is the sole manipulation requisite to impart to the product the character of *sugar* in a general commercial sense. It is at once the oldest and the crudest process of sugar-making. The product that it yields contains all of the sugar and all of the impurities originally contained in the juice of the cane. It is, strictly speaking, a mixture of pure sugar and molasses. The improvements that have in more recent times been made on this process relate solely to the improvement in the quality of the product as a material for refining.

The operation of refining consists essentially in the operation of separating the crude or *raw* sugar into its two ingredients, viz, pure sugar (refined sugar) and *molasses;* the latter term being used to denote the liquid or uncrystallizable impurity contained in all raw sugars, and which when freed from all of the sugar that can be economically extracted therefrom is technically known as *sirup.*

The typical raw sugar resulting from the process just described contains a very large proportion of molasses, the complete removal of which necessitates a very tedious and expensive process of refining. It has therefore been found advantageous to subject the material obtained by the concentration of the cane-juice to a process of partial refining or separation of molasses at the place of production, and according to the greater or less degree of perfection to which this refining is carried the sugar is advanced to a greater or less degree beyond the raw state, and the subsequent refining to which it is subjected on reaching this country is proportionately facilitated and the market value of the sugar as the raw material for refining proportionately enhanced. The raw sugars of commerce, therefore, vary greatly in quality, grade, or saccharine strength, and hence in market value.

The manufacture of raw sugar by the primitive method to which reference has been made in the foregoing paragraphs is described in the following terms by an eminent authority,* as it was practiced in India:

> The cane-juice is boiled by the cultivator to an inspissated state. There are two ways of performing this. The juice, taken out of the vessel at the foot of the mill, is conveyed in earthen pots either to a large iron boiler set over a furnace in a house or shed adjoining, or in earthen pots placed on a platform, under which a brisk fire is kindled and fed by the dry-squeezed canes. It remains in these pots in a boiling state for four or five hours, during which time it is carefully scummed with a wooden ladle and cleared from the gross feculencies. The greater the attention paid to this process, the more, of course, is its quality improved and its quantity lessened. The sufficiency of the boiling is ascertained by the liquor falling clear, drop by drop, from the ladle. If thick and in a body, it is over or under boiled. In both cases the *sugar* will have a small grain, and in the latter it will have a bitter taste. This sirup is put, after boiling, into large jars, and a little of it is rubbed over their edges, which is thought to promote the formation of the grain. It is in this state sold to the sugar-boiler,† under the denomination of *goor.*

* The Nature and Properties of the Sugar Cane. By George Richardson Porter, F. R. S. London, 1843, p. 179.

† Refiner.

In Benares the natives boil the juice in flat iron pans of small capacity, and continue stirring and skumming the liquor with wooden ladles; if they wish to make it very pure they add some milk. When the grain appears formed, the pan is taken from the fire and placed on the ground, where the liquor is again well stirred and agitated with the ladle until it cools and forms into a *coarse sugar*, which they scrape together and lay out on cane-leaves or cloths to dry. This is now called *bhelee*. It is used by the natives in its coarse state, or sold to the sugar-boilers to be further refined.

The authority just cited defines as "*a coarse sugar*" the material obtained by simply evaporating the juice of the sugar-cane to a solid or semi-solid consistence. Commercial usage has, however, introduced a number of specific terms to distinguish the different varieties of sugar, and in this country the Indian sugar the manufacture of which has just been described would be termed "concrete," a specific variety of sugar, just as the terms "muscovado" and "centrifugals" are used to designate other varieties.

The fact that the concentration of cane-juice to the point of crystallization is sufficient to impart to the product the character of *sugar* as a dutiable article has long been recognized by the Treasury Department. Heyl (United States Duties on Imports, 1879 foot-note to page 57) states:

Concentrated molasses.—Under the act of 1846 the department held that "the article imported under this designation, being brought by the process of manufacture to the point of crystallization, was to be considered an inferior sugar, and to be so taken in the appraisement, ascertainment, and estimate of the foreign general market value of the article. The Cuban authorities treat it as an inferior sugar. Melado is manufactured from the juice of the sugar-cane by boiling, thus producing a sweet sirup superior in quality to molasses. Concentrated melado is held to be a manufactured sugar in a green state, and is produced by boiling the melado to the point of crystallization. (Tr. Reg., p. 562.)

This fact is furthermore distinctly established in the tariff act of March 3, 1875, section 3 (18 U. S. Statutes at Large, 339), which reads:

Provided, That concentrated melado or concrete shall hereafter be classed as sugar, dutiable according to color by the Dutch standard; and melado shall be known and defined as an article made in the process of sugar-making, being the cane-juice boiled down to the sugar point, and containing all the sugar and molasses resulting from the boiling process, and without any process of purging or clarification; and any and all the products of the sugar-cane imported in bags, mats, baskets, or other than tight packages, shall be considered sugar, and dutiable as such.

Under the terms of the foregoing act, melada (or melado), which in Schedule G of the revised tariff is classified apart from sugar, and made subject to a specific duty of 1½ cents per pound, is defined as "an article made in the process of sugar-making, being the cane-juice boiled down to the sugar point, and containing all the sugar and molasses resulting from the boiling process, and without any purging or clarification." The term sugar point is here susceptible of but one interpretation; it means that point at or beyond which the product commences to assume the character of *sugar*. Until this point is reached the product is melado; after it is reached or passed the product is sugar; that is to say, it becomes concentrated melado, which by the terms of the same act is sugar in the sense of an article subject to classification for duties by the Dutch standard. In the technology of sugar-making the "sugar point" means that stage in the boiling at which grains or crystals of sugar begin to separate from the liquid. The genesis of sugar as a dutiable article is unmistakably defined by the act in question; it is complete even before the act of boiling is accomplished or terminated. When the sugar point is reached and the sugar begins to crystallize, or granulate, the product is sugar, and dutiable by the Dutch standard. No matter how far the opera-

tion of boiling or evaporation may thereafter be carried, the essential character of the product as a dutiable article remains unaffected and the same is true of all subsequent manipulations to which it may be subject short of those which would transform it into complete refined sugar. *The manufacture of sugar as an article dutiable by the Dutch standard is terminated by the act of crystallization or granulation.*

That the foregoing interpretation of the act of March 3, 1875, is the only correct one is furthermore evident from the final clause therein which reads: "And any and all products of the sugar-cane imported in bags, mats, baskets, or other than tight packages, shall be considered sugar, and dutiable as such." No article can be imported in loose packages unless it possesses a solid or semi-solid consistence. But the reason why, in the course of the concentration by evaporation of the juice of the cane, the product assumes a solid or semi-solid consistence, is that the sugar contained therein solidifies, or, in other words, crystallizes or granulates. Here, again, the crystallization or formation of the grain is made the distinctive test of the dutiable character of the product.

All raw or unrefined sugars and all partially refined sugars are mixtures of sugar and molasses in varying proportions. Concrete or *bheli*, for instance, contains all the molasses produced during the manufacture, and in all sugars except the purest refined sugars the proportion of molasses varies according to the amount of drainage the sugar has suffered at the manufactory, or even the length of the voyage to which it has been subjected. Wray,* for instance, speaks of the "constant drainage during the voyage to England, and even afterwards, until sold." Soames† describes the drainage of sugar in the manufactory and in transportation in the following terms:

* * * When the mixture of sugar and molasses has become cold it is dug out of the coolers, the crust on the top being thoroughly broken up and mixed with the rest of the contents, and transferred to hogsheads placed over a cistern to receive the molasses. These hogsheads have a series of holes bored in their bottoms, into each of which is fitted a reed or rush of sufficient length to extend slightly above the top. After a few days, when the sugar or mixture of sugar and molasses has settled down in the hogsheads, these rushes are withdrawn, and the molasses allowed to run out through the holes. This process of drainage is very tedious, and at the best most ineffectual, a large proportion—usually as much as thirty to forty per cent.—remaining in the sugar as shipped. As a natural consequence, during the voyage the hogsheads continue to drain, and the molasses mixing with the bilge-water is pumped overboard. The small amount of molasses that remains when the hogsheads arrive at the market serves only to darken the sugar and depreciate its price.

It is clearly manifest from the foregoing that the mixture of sugar and molasses furnished as a finished product from the manufacturer to the shipper has no constancy or permanence of character. As a mixture it is liable to alteration in the relative proportion of its ingredients, from day to day, from the time it leaves the manufactory to the time of consumption. The only ingredient therein that, barring the accidents and losses incident to the transportation of all merchandise of perishable nature, does not vary in absolute amount with the time of keeping is the crystallized or granular sugar. This is the substance to which the fixed commercial value and character of the mixture is to be ascribed. It is the only ingredient on which the duty is levied. Its manufacture terminates when it has been crystallized out of the water

* The Practical Sugar Planter. By Leonard Wray. London, 1848, p. 372.

†A Treatise on the Manufacture of Sugar from the Sugar Cane. By Peter Soames. London, 1872, p. 75.

in which it was dissolved, independently of any subsequent purification or drainage to which it may be subjected.

The drainage of raw sugar, like all other operations of separating or resolving it into its component parts, viz, pure sugar and molasses, is an operation of refining. The method, as practiced in India, is described by Porter* in the following terms:

Another kind of sugar is made from *goor*, not so refined as the ~~bhelee~~, called "*dowloa*." It is prepared as follows: *Goor* is put into baskets very closely woven, and kept in them until about one-fourth part has drained gradually into the vessels placed underneath. What remains in the baskets, being an impure, dark-colored, damp sugar, is removed into other baskets of a rather more open texture, and left to strain through for three or four days, exposed to the air; the baskets are then covered with the *pattha*† and kept for five or six days, fresh weeds being applied as the old ones become dry; during this time the molasses contained in the sugar continues to drip through the bottoms of the baskets into other vessels. After this process the sugar remaining in the baskets appears to be hard and dry, and is scraped off by an iron instrument. If the sugar towards the middle or the bottom of the basket should appear damp and not sufficiently cleared of the molasses, fresh leaves are again applied, and this operation is continued until the sugar becomes sufficiently dry.

It will be observed that the author cited considers "*dowloa*" to be a partially refined sugar, inasmuch as he terms it in a comparative sense "not so refined as ~~bhelee~~," and the whole operation of refining, as he describes it, will be seen to consist in the removal of the molasses that the raw sugar (*goor*) contained.

A more recent method of partial refining of raw sugar, and one of special interest in this connection, is the process of purging in moulds and the supplemental operation of claying.

This process is described by Prof. R. S. McCulloh‡ as follows:

On claying (*Fr.*, *terrage*).—This process, the office of which is the removal of the dark-colored mother-liquor, or molasses, from the crystallized masses of sugar, is practiced by the refiners as well as by the beet and cane sugar makers. It is, when compared with liquoring, a very rude method, and should be abandoned on account of the great waste which attends it (25 per cent., more or less). I shall not, therefore, discuss all the details of this process, but limit myself to a succinct description of it, and an exposition of the facts upon which an intelligent mode of proceeding should be based.

The clay to be employed should be perfectly plastic, and must not contain sulphuret of iron, which may become soluble. It is well mixed into a fine paste with water, which is done either by hand or by a mill turned by a horse or other power, and this paste is then put on the surface of the sugar, previously levelled in the conical moulds; the water passes from the clay slowly and gently, occupying the interstices between the grains, and dissolving the molasses and a portion also of the sugar. The saturated solution thus formed displaces mechanically the molasses from the inferior strata, and when it is in turn displaced by the sirup formed by the water with the purified sugar of the upper portion of the mass the whole loaf becomes free from molasses.

By the refiners this operation of claying is carried to the extent of removing the molasses entirely, so that the whole loaf becomes white; after which it is stood upon its base to diffuse the sirup through it uniformly, and then placed in a stove to dry.

But by the manufacturers of clayed sugar in Cuba and elsewhere it is found too wasteful to carry the process of claying so far. When the clayed sugar is taken from the mould, or knocked out, as it is called, the loaf is therefore perfectly white only at its base and dark brown at the tip, while the intervening portions are gradually more or less white or brown as they are respectively nearer to the *white* or *brown* end. A mass so constituted may, of course, be divided into an indefinite number of grades of sugar, differing from each other successively by almost imperceptible variations of color and quality.

The foregoing description characterizes the operation of claying simply as the removal of the "dark-colored mother-liquor or molasses." It is, furthermore, therein stated that the color of the product varies

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*Op. cit., p. 183.

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‡Report on Sugar. Executive Document No. 50, Twenty-ninth Congress, second session, p. 287.

with the degree to which the operation of claying, that is to say, the removal of the molasses, is carried. As in the case of a mixture of pure sugar and molasses the removal of the molasses increases to a corresponding extent the percentage of pure sugar remaining in the residue, the authority cited shows conclusively that the color varies inversely as the percentage of pure sugar in the clayed samples. He furthermore characterizes the method of claying as a process of refining, effecting when carried to its extreme limit the complete removal of the molasses.

From the foregoing considerations it is evident that the *manufacture* of sugar in a general commercial sense, and as an article dutiable by the Dutch standard, is terminated when the act of crystallization is accomplished. All other operations to which it may be subjected after crystallization are operations of refining, not essential to the production of an article which, by the terms of the act of March 3, 1875, possesses all the attributes of sugar as an article subject to classification for appraisement by the Dutch standard, and hence not pertinent to the question at issue.

METHODS OF CLASSIFICATION OF SUGAR AS A DUTIABLE ARTICLE.

The first tariff act of the United States Congress inaugurated the custom of dividing sugars into different classes, representing different qualities or grades of saccharine strength, for the purpose of assigning to each class a specific duty proportional to the commercial grade and value. The language of the portion of the said act (act of July 4, 1789) relating to sugars is as follows, viz:

> On brown sugars, per pound, one cent; on loaf sugars, per pound, three cents; on all other sugars, per pound, one and a half cents. (1 United States Statutes at Large, 24.)

These three classes may be otherwise defined as—

1. Raw sugars.
2. Refined sugars.
3. Partially refined sugars.

No specific tests are directed to be used, but the classification was left to be effected by the methods in general commercial use.

The system of classification into raw and refined sugars, with specific duties for each class, was continued until the year 1846, when an ad valorem duty was substituted.

The system of classification and specific duties was revived by the act of March 2, 1861 (12 U. S. Statutes at Large, 178), which reads:

> On raw sugar, commonly called muscovado or brown sugar, not advanced beyond the raw state by claying or other process, and on sirup of sugar or of sugar-cane, and concentrated molasses or concentrated melado, and on white and clayed sugars when advanced beyond the raw state by claying or other process, and not refined, three-fourths of one cent per pound; on refined sugars, whether loaf, lump, crushed, or pulverized, two cents per pound; on sugars after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, four cents per pound.

The foregoing act distinctly recognizes that species of partial refining which effects the advancement of the product beyond the raw state without bringing it fully into the condition of refined sugar, the latter term being applied only to the purest forms of sugar known to commerce, viz, "loaf, lump, crushed, or pulverized." It moreover contains the first distinct recognition of the element of color as a factor in discriminating between refined or pure and raw or impure sugars; the third class mentioned, viz, refined sugars "when they are tinctured, colored,

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The foregoing act distinctly recognizes that species of partial refining which effects the advancement of the product beyond the raw state without bringing it fully into the condition of refined sugar, the latter term being applied only to the purest forms of sugar known to commerce, viz, "loaf, lump, crushed, or pulverized." It moreover contains the first distinct recognition of the element of color as a factor in discriminating between refined or pure and raw or impure sugars; the third class mentioned, viz, refined sugars "when they are tinctured, colored,

or otherwise adulterated," being manifestly established for the purpose of imposing a prohibitive duty on those sugars which, by special manipulation, have been divested of that natural relation of color to purity, or advance in saccharine strength, which is one of the more important means of discriminating between refined and unrefined sugars.

In the act of August 5, 1861, the line of demarkation between raw and partially refined sugars is more strictly defined, and a limit is assigned to the operation of advancement beyond the raw state by operations of concentration of saccharine strength, the said limit being the degree of advancement beyond the raw state manifested by the sample of sugar marked "No. 12" on the standard series of sugars furnished by the Government of Holland, and generally known by the name of "the Dutch standard," or, on account of the degree of color of these sugars being in a fixed relation to their richness or saccharine strength, and hence available as a means of comparison with other sugars, "the Dutch color standard," or also "the Dutch standard in color."

The section of the said act relating to sugars is as follows (12 U. S. Statutes at Large, 292):

> On raw sugars, commonly called muscovado or brown sugar, and on all sugars not advanced above number twelve Dutch standard by claying, boiling, clarifying, or other process, and on sirup of sugar or of sugar-cane, and concentrated molasses or concentrated melado, two cents per pound; and on white and clayed sugar when advanced beyond the raw state above number twelve Dutch standard by clarifying or other process, and not yet refined, two and a half cents per pound; on refined sugars whether loaf, lump, crushed, or pulverized, four cents per pound; on sugars after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, six cents per pound.

In the foregoing act the "Dutch standard" is, for the first time in the history of tariff legislation in the United States, directed to be used in the classification of sugars for appraisement, and it is directed to be used not as a measure of color, for the word color does not occur in the statute, except indirectly in the final clause imposing a prohibitive duty on colored or adulterated refined sugars. The Dutch standard is here directed to be used as a measure of "*advance beyond the raw state*," by operations termed "*claying, boiling, clarifying*, and other processes," which, so far as they are stated, are in their nature processes of concentration of saccharine strength. This specific limitation of the classification to the effects of operations of concentration of saccharine strength would be sufficient of itself to characterize the classification as one based exclusively on saccharine strength, but the act is still more definite in this respect. It provides that a duty of two and a half cents per pound shall be imposed "*on white and clayed sugar when advanced beyond the raw state above number twelve Dutch standard, &c.*" As the sugars of the samples known as the Dutch standard are none of them *white* short of number twenty, the term "white sugar, when advanced beyond number twelve Dutch standard," when used of color alone, would be utterly irrational, absurd, and devoid of all signification. White sugar can only be said to be below or above number twelve Dutch standard in the sense of being greater or less in degree of saccharine strength than the sample of sugar known as number twelve Dutch standard; that is to say, greater or less in degree of "advance beyond the raw state." In the matter of *color*, white sugar is never below number twenty Dutch standard.

It is to be observed that the Dutch standard is here directed to be used as a basis for classification, without limitation as to the means to be employed to ascertain the identity in the quality of the sample of sugar under appraisement with that of the sample of sugar of the

Dutch standard. In point of fact, the color of the sample is one of the most important means of effecting the comparison, although, as will hereafter be shown, not the only means employed to that end. The use of the indication of color is based upon the fact that the color of pure sugar is white and that the color of a mixture of pure sugar and molasses, like the raw sugar of commerce, will vary in intensity according to the amount of the dark-colored molasses contained therein, and hence inversely as the saccharine strength. If, therefore, a series of sugars be taken representing a series of, say, twenty samples, rising progressively from the dark, raw material saturated with molasses to the white, pure, refined sugar, through all the intermediate grades of purity, this series will show a gradual progression in intensity of color in inverse ratio to that in purity or saccharine strength. Such a series may therefore serve as a measure for the comparison *of that species of color which varies inversely as the saccharine strength or advance beyond the raw state*, and when so used it is possible, from the color alone, to refer any sample of sugar to its corresponding sample on the Dutch standard. Wherever the Dutch standard is still employed as a basis for commercial transactions in raw sugars it is the custom to ascertain from such other indications, as the "feel" of the grain and estimation of the degree of moisture contained in the sample, whether the external color bears that relation to saccharine strength which is an indispensable requisite for its employment as a means of comparison.

The tariff act of December 24, 1861 (12 U. S. Statutes at Large, 330), maintains intact the classification of the act of August 5, 1861, merely changing the rates of duty assigned to the different classes.

In the tariff act of July 14, 1862 (12 U. S. Statutes at Large, 543), the Dutch standard is for the first time termed the "Dutch standard in color." The section of this act relating to sugar is worded as follows:

> On sirup of sugar or of sugar-cane, or concentrated molasses, or concentrated melado, two cents per pound; on all sugars not above number twelve Dutch standard in color, two and one-half cents per pound; on all sugar above number twelve and not above number fifteen Dutch standard in color, three cents per pound; on all sugars above number fifteen, not stove-dried, and not above number twenty Dutch standard in color, three and one-half cents per pound; on all refined sugar in form of loaf, lump, crushed, powdered, pulverized, or granulated, and all stove-dried or other sugar above number twenty Dutch standard in color, four cents per pound: *Provided*, That the standards by which the color and grades of sugars are to be regulated shall be selected and furnished to the collectors of such ports of entry as may be necessary, by the Secretary of the Treasury, from time to time, and in such manner as he may deem expedient; on sugar candy, not colored, six cents per pound; on all other confectionery made wholly or in part of sugar, and on sugars after being refined, when tinctured, colored, or in any way adulterated, ten cents per pound; on molasses, six cents per gallon. * * *

The principal change introduced in the classification of sugars by the foregoing act consists in the application of a remedy for a very grave defect in the act of December 24, 1862, viz, the assignment of a single rate of duty in the last-named act to all of the sugars ranking between number twelve Dutch standard and refined sugars. It is usually, an easy matter for the manufacturer, by the systems of partial refining before alluded to, to produce sugars which, without coming under the narrow restrictions to which the act limits the definition of "*refined* sugars," are, nevertheless, so far advanced beyond the raw state that they can successfully compete with refined sugars in the market for direct consumption. The act of July 14, 1862, classifies all sugars above number twenty Dutch standard with refined sugars, and includes *granulated* sugars under the latter term. The sugars lying between number twelve and number twenty are divided into two classes—those be-

low and those above number fifteen, the latter class being specially defined as limited to those sugars that are not stove-dried, *i. e.*, not concentrated in saccharine strength by removal of moisture. Refined sugars when colored or adulterated are made subject to a still higher prohibitive duty, and the Secretary of the Treasury is again authorized to use his discretion in the selection of the standard by which color and grade are to be regulated. In all other respects the system of classification is maintained intact. No new definition is assigned to the Dutch standard, nor is it directed to be employed in any sense contrary to that in which it was employed when first introduced as a basis for classification. It is still a measure of advance beyond the raw state or of saccharine strength. The indication of "color" is not invested with a new sense as an absolute basis for classification, for the prohibitive duty on colored sugars distinctly maintains the principles of the preceding tariff acts; it remains as it was before, an indication that may or may not be used as a means of comparison with the Dutch standard at the option of the Secretary of the Treasury.

By the act of June 30, 1864, the classification by the Dutch standard is maintained unchanged. The duty on colored or adulterated sugars is increased to fifteen cents per pound.

The act of July 14, 1870, as amended by the act of December 22 of the same year, establishes the following classification, viz:

(1.) All sugar not above No. 7.
(2.) All sugar above No. 7 and not above No. 10.
(3.) All sugar above No. 10 and not above No. 13.
(4.) All sugar above No. 13 and not above No. 16.
(5.) All sugar above No. 16 and not above No. 20.

In other respects the system of classification remains unchanged.

The act of December 22, 1870 (16 U. S. Statutes at Large, 397), contains the following proviso, viz:

> *Provided*, That the Secretary of the Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers in such manner as to ascertain the true quality of such sugar. * * *

The act of June 22, 1874 (U. S. Revised Statutes, 1094–1099), maintained intact the classification of the act of July 14, 1870.

The act of March 3, 1875 (18 U. S. Statutes at Large, 339), imposes an additional duty on sugars, but leaves the classification unaltered, except in the proviso to section 3, which directs "that concentrated melado or concrete shall hereafter be classed as sugar dutiable according to color by the Dutch standard," and that "all products of the sugar-cane imported in bags, mats, baskets, or other than tight packages, shall be considered sugar, and dutiable as such."

From the foregoing synopsis of tariff legislation relating to the classification of sugars for appraisement for duty, it will be seen that the fundamental principle of the system of classification obtaining in this country has always been the division of the sugars into classes which represent distinct degrees of saccharine strength, from the lowest class or typical raw sugar, through the intermediate classes which represent the progressive advance beyond the raw state by methods of concentration of saccharine strength, to refined or nearly absolutely pure sugar, these classes being defined or limited by comparison with the series of standard samples known as the Dutch standard. The manner in which this comparison is to be made is not defined by the statutes, other than in the general instructions to take samples that shall represent the *true quality*, and the authorization to select and furnish the standard by which the *grade* and color are to be regulated; the details

are left to the discretion of the Secretary of the Treasury, as the executive officer of the Government intrusted with the administration of the revenue.

In view of the fact that the statutes do not contain definite instructions regarding the manner in which the comparison between the samples of sugar under appraisement and the samples of sugar known as the Dutch standard shall be effected, and furthermore in view of the fact, as ascertained by the investigations of the officers of the Treasury Department, and generally conceded by the importers, that the apparent color of a very large class of sugars bears no relation to their saccharine strength or advance beyond the raw state, and hence cannot be employed as a means of comparison to ascertain the extent to which they agree in these respects with the several samples of the Dutch standard, the Secretary of the Treasury, under date of July 19, 1879 (circular No. 125), directed the abandonment of the apparent color as a means of comparison with the Dutch standard, and substituted therefor the direct determination of the saccharine strength or degree of advance beyond the raw state. The terms of the order in question are as follows:

All sugars containing ninety per cent. and not more than ninety-four per cent. of crystallizable sugar, the apparent color of which is not above number seven Dutch standard in color, shall be classified as above number seven and not above number ten Dutch standard in color. All sugars containing more than ninety-four per cent. of crystallizable sugar, the apparent color of which is not above number ten Dutch standard in color, shall be classified as above number ten and not above number thirteen Dutch standard in color.

The fact having become apparent that the variable percentage of moisture in sugar was a disturbing element in the determination of the relations between the saccharine strength of the samples under comparison, the foregoing order was modified by the order of September 2, 1879, which reads;

All sugars the apparent color of which as imported is not above number seven Dutch standard in color, and which contain over ninety-three per cent. and not over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance, shall be classified as above number seven and not above number ten Dutch standard.

All sugars the apparent color of which as imported is not above number ten Dutch standard in color, and which contain over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance, shall be classified as above number ten and not above number thirteen Dutch standard.

HISTORY OF THE DUTCH STANDARD.

The history of the Dutch standard is given in the following terms by Dr. Richard von Kaufmann, one of the most eminent European authorities on the subject of the relation of the sugar industry to the customs and internal revenue: *

The importance of the determination of the proportion of pure sugar contained in raw sugars has also been abundantly recognized from the beginning of the question of taxation, and in course of time every conceivable attempt was made to find a reliable method for this purpose, without to this day having solved the problem in a manner *entirely* satisfactory to the requirements of those interested.

The oldest method of determining the value of raw beet-sugar was the classification according to types and categories, a method which France was the first to adopt, having derived it from the customs originally introduced in Holland in the trade in colonial † sugar.

* Die Zucker-Industrie in ihrer wirthschaftlichen und steuerfiskalischen Bedeutung fuer die Staaten Europas. Von Richard von Kaufmann, Dr. Jur. Berlin, L. Guttentag (D. Collin), 1878, p. 82.

† *Colonial sugar.*—The term is used in Europe to denote sugars of tropical origin, originally from the Dutch colonies. At present it is used in a general sense to distinguish the sugar of the sugar-cane from beet-sugar.

This valuation of colonial sugar by the so-called color standard originated at a time when saccharometry lacked the optical aids today in our possession, and one in which sugars of tropical origin alone came under consideration. The necessity was at that time already felt to conduct the purchase of larger quantities of sugar on the basis of a certain normal sample. The Dutch agents and brokers came to a mutual understanding, and mixed average samples of the Indian sugars handled in the Dutch market, of which the best, marked No. 20, represented a nearly pure sugar, which was dry, sharply crystallized, and somewhat grayish white in color, while the lowest number represented an average of the darkest-brown sugars. The lowest sort of those that now appear in commerce is marked No. 6, and represents a dark-brown, soft sugar, rich in sirup. The numbers lying between Nos. 20 and 6 are progressive transitions between these extremes.

This in itself, and under the then existing conditions, not unpractical method was at the time adopted with all the greater readiness for the reason that the need of a method of determining the value of crude sugars of different qualities, resting on the imple indications of the senses, had been equally keenly felt both by the manufacturerss and the dealers, in the estimation of the commercial value of the article, and the revenue authorities (*fiscus*) for the correct adjustment and apportionment of taxation.

The introduction of this method is based on the observation that sugar in a pure state is, in itself, throughout white; on this was founded the theory (*annahme*) that the degree of coloration, which could only be caused by the intermixed substances or decomposition products of sugar adhering to the sugar, was to be considered as a measure of the lower value of the sugar. At the same time, as a conversion of the crystals to powdered sugar caused the mass to seem less intensely colored than would otherwise be the case, it was sought to perfect the method by testing the sugar as to the sharpness of the grain, which could be felt by rubbing it between the fingers; and finally it was sought to estimate the degree of dampness of the sugar in order to be able to approximately determine or estimate the amount of water contained therein.

The color types, which by this method furnished the principal criterion of the value of the sugar, had originally in the case of colonial sugars a tolerably well-justified importance, which, however, can no longer be ascribed to them, since technical progress has made it easy for the industry to effect the coloration of raw sugars by artificial means without materially altering the value of its yield in pure sugar (refined sugar)—*i. e.*, its refinery yield. It is at present not only possible to prepare raw sugars with a lighter color, which shall show a bright luster even in the last products, without their containing any more pure sugar than the far darker-colored products of other manufactories, but sugars of high percentage are frequently colored dark in order to reduce the tax or duty to which they are liable, without causing them to suffer any reduction of refinery yield. * * *

It will be observed that the authority cited defines the Dutch standard as a measure of value and saccharine strength only; the comparison of the shade of color being one of the principal indications, but supplemented by other tests, having for their object primarily to ascertain whether any cause exists that would disturb that relation between color and saccharine strength which the employment of the shade of color as a means of comparison presupposes as an indispensable condition. The theory underlying the Dutch standard is clearly enunciated, and it is that the saccharine strength of raw sugar varies inversely as the intensity of the coloration, and conversely, that the species of color of which alone the Dutch standard takes cognizance is that species of color which varies inversely as the saccharine strength That this is the sole sense in which the physical attribute of color is employed as an indication in the Dutch standard is clearly shown in the description of the mode of applying it; the precautions as to the "feel" of the grain, &c., being employed to ascertain if the external or visible color of the sample does, in fact, bear that relation to saccharine strength which alone would permit the application of the Dutch standard by simple visual inspection and comparison.

The Dutch standard is described, not as a series of colored substances, for which a series of strips of colored card-board might with perfect propriety and vastly greater convenience be substituted, but as a series of *sugars* representing different commercial grades, vary-

ing progressively in saccharine richness from the lowest to the highest percentage of saccharine strength, and which are not compared with the sample to be tested by color alone without careful preliminary tests to make sure that this color bears a definite relation to saccharine strength. Hence, from the first origin of the Dutch standard, and in the country where it originated, and from whom we first learned to use it, it was the custom to use in connection with it the best tests then at hand to make sure that the external color of the sample bore this necessary definite ratio to the saccharine strength.

The deceptive character of external or apparent color as a criterion of saccharine strength when employed without the control of such tests as were used when the Dutch standard was first devised is abundantly evident from the following extract from the work of Professor McCulloh: *

> In Cuba it is customary to make six grades of clayed sugar on an estate—two grades of white and four of brown. Only five grades are, however, made from one single loaf, in consequence of the white sugar of each loaf being classed as of the first or second quality by comparing it with standard samples. The Spanish terms or names for these six qualities are: 1st, *blanco primero*, or *blanco florete* (Fr. *première*), prime white; 2d, *blanco segundo* (Fr. *seconde*), second quality white; 3d, *quebrado florete* (Fr. *troisième*), superior brown or yellow; 4th, *quebrado primero* (Fr. *belle quatrième*), prime brown; 5th, *quebrado segundo* (Fr. *quatrième ordinaire*), second quality brown; 6th, *cucuruche* (Fr. *tête*), cockroach or inferior brown tips. It is of course the desire and aim of every sugar-maker to manufacture as large a quantity as possible of *florete* sugars; but the quality of the juice, the dose of lime, the regulation of the heat, and the degree of purging are so many circumstances which modify more or less the result. Hence, the qualities of the sugars made on the various soils and estates, as at different times or by different persons on the same estate, are very distinct and command higher or lower prices accordingly. Hence, also in commerce the six grades of any one estate are compared with those of other estates, and much more nice and numerous classifications of quality are fixed upon. A prominent and experienced merchant of Cuba informs me that he classifies clayed sugars into about fifty varieties, each of which is better adapted than the others to some particular market, and therefore has its own proper fluctuation of demand and supply, and consequent relative price.
>
> The above-mentioned facts are of importance, especially in relation to any tariff framed on the basis of specific duties, for they show how very imperfect and insufficient a mere classification of "white, yellow, and brown clayed sugars" must inevitably be, and also how difficult it is to make proper distinctions which shall depend on anything else than the values. The color of sugars is only one of the specific differences which regulate their relative values, and for clayed sugars it is indeed far less important than the strength and dryness of the grain. Clayed sugars are usually bought by the refiners, and so easily can they extract all coloring matter by the improved method of filtering through animal charcoal, that the color of a sugar has become a secondary matter in comparison with its grain. A very slight difference in price in favor of brown sugars will therefore cause them to be preferred to white.
>
> Under the tariff of 1842 the revenue officers experienced great difficulty in distinguishing between white and brown clayed sugars, and the difficulty was not even entirely removed by the method that was adopted of selecting standards and furnishing samples thereof to the surveyors of the different ports, by which they could so regulate their inspections as to produce uniformity of practice. One reason for this difficulty is that it requires an experienced judge to decide whether a sugar is to be classed as *blanco segundo* or *quebrado florete*, between which there is only a shade of difference in color, if any at all, for sometimes a difference of *grain* determines to which class the sugar properly belongs, in which case the sense of touch is relied on more than the eye, a good grain being recognized by a gritty feeling between the thumb and forefinger, like that produced by a particle of sand. Between absolute whiteness and the dark brown of the *cucuruche* there are and can be no division lines of color which shall distinguish *white* from *yellow* or *yellow* from *brown* clayed sugars, the clayed loaf being continuously and gradually shaded through every intermediate degree of brownness, from its snow-white base to its molasses-dyed tip. All classifications, therefore, based upon color only are arbitrary and capricious, as well as too easily varied to be adapted to revenue purposes.

In a report on the assessment and collection of duties on sugar made in the year 1878 to a committee of sugar importers constituted as fol-

*Op. cit., p. 288.

lows, viz, Moses Taylor & Co., E. D. Morgan & Co., H. H. Swift & Co., Havemeyers & Elder, S. & W. Welsh, and Theo. Raymond & Co., the Hon. David A. Wells* gives the history, of the Dutch standard as follows, viz:

Dutch standard.—The so-called Dutch standard was first introduced into the American tariff in 1861, through the provision that thereafter sugars should be classified for the purposes of the customs revenue into those *not* above No. 12 Dutch standard of color,† and refined sugars; the number 12 being assumed as representing the dividing line between raw and refined sugars. This standard finds its origin and name in the circumstance that it was adopted many years ago by the Dutch merchants, primarily for the purpose of classifying the various sugar products of the Island of Java, a Dutch East Indian dependency. It is founded on the assumption that color in sugars is the coefficient of purity or saccharine strength; and starting with the very lowest grade of sugar that is found in commerce, one that by reason of the crudeness and imperfection of its manufacture is almost black with impurity, and designating such sugar with a given number as a unit for color, say from 1 to 4, that each additional number represents a corresponding progressive gain in color, and if in color, then also a corresponding gain in saccharine strength or purity. The standards as thus arranged by the Dutch gradually came into extensive use throughout the world for the classification and designation of the sugars of commerce, and in many countries also became the basis for the assessment of customs revenue, specific samples of sugar corresponding to the different numbers, and hermetically sealed in glass bottles, being annually prepared and distributed by the Dutch authorities. All sugars according to the Dutch standard which grade below No. 7 in color are the typical crude sugars, simply purged from molasses, and really constitute the raw material for every further process of manufacture; and every grade of sugar above No. 7 may be regarded as an advanced manufacture, every step forward in which reduces (brightens) the color and increases the cost, through the added expense of labor and capital. * * *

The author just cited also defines the Dutch standard as a measure of saccharine strength, although he is less explicit as to the mode of application than the author first cited (von Kaufmann), and lays undue stress on the color, *i. e.*, visible or external color, as if it were the sole element of comparison.

The character of the Dutch standard as a measure of saccharine strength has more recently been defined by the Government of Holland, which, by the law of May 25, 1880, has decreed that in the case of all sugars the general character of which leads to the assumption that their saccharine strength is in excess of that of the class to which they would when compared by their color seem to belong, the *refining yield* shall be determined by chemical analysis for the purpose of ascertaining the true classification by the Dutch standard. This determination of the refining yield is in accordance with the general principle that the Dutch standard is a measure of value as well as saccharine strength. On the continent of Europe, namely, the commercial valuation of sugar for refining purposes is based on the percentage of *hard* sugar that can be economically extracted therefrom, independently of that portion of the sugar which during the refining is retained in the sirup. The Government of Holland, therefore, does not control the indication of color by the determination of the actual saccharine strength of the samples under classification and of the samples of the Dutch standard, but directs that that portion of the sugar which cannot be obtained in the form of hard sugar shall be removed by the operation of refining known as "Scheibler's method of determining the refining yield," and that the residual amounts of hard sugar shall be determined by the polariscope and used as a basis for comparison.

* The Sugar Industry of the United States, and the Tariff: a Report on the Assessment and Collection of Duties on Imported Sugars. By David A. Wells. New York, 1878, p. 24.

† The words "of color" are not in the original act.

Under date of September 25, 1880, the following edict was issued by the Government of Holland: *

ART. 1. The richness of sugar which is recognizably colored, or whose quality permits the supposition of a higher degree of richness than that of the highest number of the class to which it should according to the color standard belong, is determined in the following manner:

(*a.*) Every sample of sugar to be examined is, for the purpose of the investigation, to be made uniform by grinding fine and mixing, and especially in such manner that no alteration in the composition may take place from loss or absorption of water, or in any other way.

(*b.*) Of the sample a portion is weighed off of such weight as may be necessary, in order that if it consists of perfectly pure and dry sugar it will, by means of the following manipulations, yield a return of 100 per cent. on the polariscope. If the sugar is wet or soft the portion taken for the assay is to be dried.

(*c.*) The assay is then successively drenched (*doortrokken*) with—

1. Alcohol of at least 99.5 per cent.
2. Alcohol of 96 per cent. perfectly saturated with sugar.
3. Alcohol of 92 per cent. also saturated with sugar.

It is furthermore washed out with a mixture consisting of one volume of acetic acid (of 390 to 430 grams of anhydrous acetic acid to the liter) and nineteen volumes of alcohol of 85 per cent., which mixture is also saturated with sugar

After washing out those ingredients that are soluble in the washing liquid, this is removed by means of a second successive drenching of the assay with the liquids named under 1, 2, and 3, but this time in inverse order; also, first with No. 3, then with No. 2, and then with No. 1; finally, this last liquid is also removed from the assay.

(*d.*) The assay thus treated is then dissolved in water, under employment of the necessary clarifying and decolorizing agents, and the percentage polarization of the decolorized liquid is then ascertained.

(*e.*) The result obtained by the careful execution of the before-named operations expresses the percentage contents of the sample.

ART. 2. The classification of the sugar results from the comparison of its contents with that which in the following table is given as the highest limit for each class:

Classes for the purpose of appraisement.	Highest limit of each class in classification by contents.	
Numbers.	Numbers.	Contents.
		Per cent.
14–10	15	97.8
9–7	10	94.4
Below 7	7	87.4

That sugar which has a higher contents than 97.8 per cent. falls in the first class.

The foregoing regulations are more fully explained in the circular of the ministry of finance of the Kingdom of the Netherlands† relating to the introduction of the new regulations in the appraisement of imports, from which the following is taken:

The law of May 25, 1880, has by no means for its object the general substitution of saccharometric methods for the color standard in the classification of raw sugars. The changes which it is intended to introduce in the existing conditions relate solely to sugars that have been purposely colored, or whose general characteristics lead to the presumption of a higher degree of richness than that of the highest number of the class to which it would according to the color standard belong. In these two special cases the contents in sugar shall be determined by the method of polarizing after washing out, as described in the Royal edict of September 25, and these sugars shall be classified according to the relation that the contents in sugar so found bears to the scale based on the investigation conducted in a similar manner of Java sugars of the numbers 15, 10, and 7 (that is to say, of a number above the highest of each class).

The foregoing regulations of the Government of Holland have been cited at length for the reason that they unmistakably define the color

* Die deutsche Zucker-Industrie. Berlin, Nov. 5, 1880, vol. v, No. 45, p. 1425.
† Niederlaendische Staats-Courant, No. 243, October 14, 1880.

standard as a measure of saccharine richness and value, and, furthermore, define the operation of classification by the color standard as one of dividing into classes of definite degrees of richness or saccharine strength.

The circular of the Dutch ministry of finance amplifies and emphasizes this principle, and explains that the law does not change the existing system of classification, but merely directs that wherever the indications of the color standard have been falsified by intentional coloration or other means the true classification by the Dutch color standard, instead of being exclusively effected by simple visual inspection and such other simple tests as were hitherto in use, shall be determined by the aid of a special method of analysis, which, in view of the relations existing in that country between color and saccharine strength, on the one hand, and saccharine strength and commercial value as a material for refining, on the other, shall adequately insure a just and equitable application of the Dutch color standard as a basis for appraisement.

While, as already stated, the method of analytical control of the Dutch color standard adopted by the Government of Holland is in accord with the commercial system of that country which makes the yield in *hard* refined sugar the criterion of commercial value, such a system would not justly represent the relation of saccharine strength to commercial value existing in this country, where the amount of *hard* sugar that a given sample of raw sugar will produce is of subordinate importance compared with the total amount of cane-sugar that the sample contains. The Scheibler's method of analysis is not here in use as a measure of commercial value, and its introduction as a basis for tariff classification would most unjustly discriminate between the two classes of American refiners, viz, the makers of hard and those of soft sugars. It would not here fulfil the second condition in the Dutch standard as a basis for appraisement, viz, the relation of saccharine strength to commercial value.

In the present system in use in Holland the polariscope is used to determine the relation between saccharine strength and the apparent color of the sample; the Scheibler's method of refining to limit the indications of the polariscope to that species of *saccharine strength* (contents in *hard* sugar) which in that country is generally accepted as a criterion of *commercial value.*

At the session of August 6, 1872, of the international conference at the British ministry of foreign affairs, on the subject of the drawback on refined sugars,* one of the British delegates, Mr. R. A. Ogilvie, surveyor-general of customs, describes as follows the relations of color to saccharine strength:

> The sugar of the cane is composed of pure sugar and molasses; and as pure sugar is white and molasses is dark, a mixture of the two gives such or such a shade of color according to the proportion in which the molasses predominates. This was the natural state of things; the shade of color was in consequence accepted as accurately indicating the quality, and purchases were regulated accordingly in England, and in France hey were made on the same type *de bonne quatrième.*

During the investigation of the question of taxation of sugars by the French ministry of agriculture and commerce, Mr. Peligot,† member of the Institute, verificator-in-chief of the assays at the mint, and one of the most eminent chemists of France, testified as follows:

> In brief, Mr. Peligot declared that as an indication of saccharine richness of a sugar e would give the preference to the shade of color, that is to say, to the types (color

* Ministère de l'Agriculture et du Commerce: Enquête sur la Question de l'Impôt du Sucre à la Consommation. Paris, 1872, t. ii, p. 60.

† Op. cit., t. ii, p. 320.

standard tr.) over saccharometry and chemical analysis, always on the condition that the types be suitably prepared and renewed whenever necessary. It is necessary to reserve the right to have recourse to saccharometry in certain cases as a means of verification. In practice for the government the shade of color gives results as exact as possible.

Concerning the specimens that have been produced of low numbers (color standard tr.), giving a considerable excess (in saccharine strength tr.), they have been made for the needs of the cause; they do not constitute the effect of a new and *bona-fide* (*loyale*) manufacture, but a means of defrauding the revenue.

And during the same investigation the Agricultural Society of France * testified that:

In short, one may say that sugar is a docile substance, lending itself to the designs of the manufacturer, who can make of it a white or brown sugar as he pleases. To-day he uses this liberty, thanks to the system of types (color standard tr.), to make a sugar of a very high price with a shade of color that corresponds to a strength of only 88 degrees. The sugar is colored with caramel; this operation is so publicly performed that there exists at Arras a manufactory bearing the sign "*caramel for coloring sugar.*"

The foregoing extracts from the leading authorities in the principal countries of Europe, as well as in the United States, show conclusively that the employment of the indication of color as a means of comparison for classification rests exclusively on the existence of a definite relation between color and saccharine strength. The operation of classification by color is universally held to be identical with that of classification by saccharine strength. The only color that can be made a basis for classification is hence that species of color that bears a definite relation to saccharine strength; it is the only species of color that can be measured by any color standard for purposes of classification.

WHAT IS THE NATURE OF THE ACT OF FALSIFYING THE INDICATIONS OF THE DUTCH STANDARD?

From the history of the Dutch standard it is evident that it is, in its nature, a measure of saccharine strength, and hence of commercial value. This is the view of the authorities already quoted; it is also the view taken by the Government of Holland, from whom we obtain the standard samples, and from whom we first learned to use them. It is the only view that can be considered to be in accord with the former use of the Dutch standard as a basis of valuation in commercial dealings in sugars for refining.

From the history of tariff legislation relating to sugars in the United States it is evident that the fundamental principle underlying every imposition of specific duties on sugars, from the first tariff act of Congress down to the present day has been to divide the different qualities of sugar into separate classes, representing different degrees of advance by operations of concentration of saccharine strength, from the typical raw sugar, which is the product of least saccharine strength, to hard refined sugar, which is nearly absolutely pure sugar. This classification being made for the purpose of assigning to, or imposing on, the sugars of each class a rate of duty that should be higher or lower in proportion to the intrinsic quality of the said sugars in the matter of advance in saccharine strength, and hence also in proportion to the commercial value as a material from which sugar is to be extracted by the operation of refining. To facilitate the operation of classification, as above defined, and to secure uniformity in practice therein, the Dutch standard was first introduced as a measure of the degree of advance beyond the raw state,

* Déposition de la Société des Agriculteurs en France. Op. cit., t. ii, p. 275.

or, what is the same thing, degree of concentration in saccharine strength, and while, from time to time, the number of the classes has been increased, so as to insure a more exact separation of the different grades or qualities, the Dutch standard is directed to be employed in the same sense as that in which it was first directed to be employed, viz, as a measure of advance beyond the raw state, no new definition of the said Dutch standard, or restriction of its employment to any other use than that to which it is directed to be applied in the act of August 5th, 1861, being contained in any tariff act from that time to the present day.

The system of classifying sugars for appraisement presents the greatest analogy to that of classifying distilled spirits. The material is in both cases a mixture of a valuable article of merchandise with an impurity of lower value, and the value of this mixture as an article of commerce is regulated by the proportion it contains of the more valuable ingredient. Spirits, as well as sugars, are subject to a specific duty, which is made *ad valorem* in principle by making it proportional to the degree of concentration of the one ingredient on which the commercial value of the mixture depends. And in the case of spirits, as well as in that of sugars, this degree of concentration is expressed, not in percentages of the valuable ingredient, but in the terms of standards no longer in commercial use.

One of the early methods of determining the strength of distilled spirits is described by McCulloh* in the following terms, viz:

> When spirits of this degree of strength is briskly agitated in a flask, a series of little bubbles form at the surface, and it is then said to give a "bead," or to be of "the Holland proof," or is simply called, in general commerce, proof spirit.

At the present day this proof standard is no longer employed in commerce; transactions in spirits being effected on the basis of the actual percentage of alcohol contained in the sample. The proof standard is nevertheless retained in the tariff, and duties are now collected on the basis of the proof gallon, proof spirits being defined by the act of July 20, 1868, amended April 10, 1869, and June 6, 1872, as "that alcoholic liquor which contains one-half its volume of alcohol of a specific gravity of seven thousand nine hundred and thirty-nine ten-thousandths (7,939) at sixty degrees Fahrenheit."

In view of this similarity in character with the Dutch standard, it becomes of special interest to consider the provisions of the internal-revenue law against evasions or falsifications of the indications of the 'proof" standard. These are as follows: (Act of June 6, 1872.)

> SEC. 38. *And be it further enacted*, That any person who shall add, or cause to be added, any ingredient or substance to any distilled spirits before the tax imposed by law shall have been paid thereon, for the purpose of creating a fictitious proof, shall, on conviction, be fined not less than one hundred dollars nor more than one thousand dollars for each cask or package so adulterated, and imprisoned not less than three months nor more than two years, and every such cask or package, with its contents, shall be forfeited to the United States.

The proof of spirits has, since the first tariff act, been determined by the instrument known as the *hydrometer*, but there are several patterns of these instruments, which vary greatly in regard to accuracy and details of construction. Section 2918 of the Revised Statutes provides that:

> The Secretary of the Treasury may, under the direction of the President, adopt such hydrometer as he may deem best calculated to promote the public interest, for the purpose of ascertaining the proof of liquors, and after such adoption the duties imposed by law upon distilled spirits shall be collected according to the proof ascertained by any hydrometer so adopted.

*Op. cit. p. 102.

Section 2914 of the Revised Statutes provides that:

> The standard by which the color *and grades* of sugar are to be regulated shall be *selected* and furnished to the collectors of such ports of entry as may be necessary by the Secretary of the Treasury, from time to time, and in such a manner as he may deem expedient.

And section 2915 of the Revised Statutes that:

> The Secretary of the Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers, in such manner as to ascertain the *true quality* of such sugar.

The only interpretation that can be placed upon these instructions is that the sampling shall be so conducted as to represent the true quality, and that the selection of the standard by which this quality or grade is to be ascertained is left to the discretion of the Secretary of the Treasury. This discretion is of precisely the same nature as that in the matter of the choice of hydrometers.

The acts of taking samples of sugars and comparing them with the standard samples are therefore defined by the statutes as acts of ascertainment of quality.

The parallelism between the Dutch standard as a measure of quality for sugars and the proof standard as a measure of quality for spirits is therefore complete, and the moral status of the act of falsifying the indications of the Dutch standard is clearly defined by the analogies already pointed out; it is precisely that of the act of creating a fictitious proof of distilled spirits.

The act of March 3, 1863, entitled "An act to prevent and punish frauds on the revenue, to provide for the more certain and speedy collection of claims in favor of the United States," provides (section 1, 12 U. S. Statutes at Large, 737)—

> And if any such owner, consignee, or agent, of any goods, wares, or merchandise, shall knowingly make, or attempt to make, an entry thereof, by means of any false invoice * * * or of any other false or fraudulent practice or appliance whatsoever said goods, wares, and merchandise, or their value, shall be forfeited and disposed of as other forfeitures for violations of the revenue laws.

And (section 3):

> That if any person shall, by the exhibition of any false sample, or by means of any false representation or device, or by collusion with any officer of the revenue, or otherwise, knowingly effect, or aid in effecting, an entry of any goods, wares, or merchandise at less than the true weight and measure thereof, or upon a false classification thereof as to quality or value, or by the payment of less than the amount of duty legally due thereon, such person shall, upon conviction thereof, be fined in any sum not exceeding five thousand dollars, or be imprisoned not exceeding two years, or both, at the discretion of the court.

Concerning the nature of the *devices* that have been used to falsify the indications of the Dutch standard we have the following statement from the eminent authority already quoted:*

> This species of modern fraud consists, as has become known, in all its details through the correspondence between one of the largest sugar factories in the Rhenish Provinces and the firm of T. Nocq Densy et fils, of Arras (France), which is printed in all the reports and blue-books, in the admixture of caramel during the production of the sugar. The most interesting piece of this correspondence, and one particularly noteworthy by reason of its naiveté reads as follows:
>
> "ST. CATHÉRINE, ARRAS, *Feb.* 1, 1872.
>
> "We have received your inquiry of the 29th ultimo.
>
> "In commerce the different kinds of sugars are paid for according to their richness in sugar; in taxation, however, the shade of color is the basis. It is therefore in the interest of the sugar-makers of France to produce sugar of dark color, without at the same time making it poorer in sugar than that of lighter color. To attain this end the

* Von Kaufmann, op. cit., p. 181.

manufacturers use caramel, the employment of which is as easy as possible. By mixing with luke-warm or hot water it is brought to a density of 20 per cent., and a half liter is poured over the sugar in the centrifugal machine at the time when the sugar is nearly centrifugated. Experience teaches the amount of caramel to be employed; according to the shade more or less is used. All of our manufacturers have been successful (gut gefahren) in the use of caramel, and we have among them customers who have used as much as 3,000 to 4,000 kilograms.

"Respectfully,

"T. NOCQ DENSY ET FILS."

The existence of these procedures was admitted by the French ministers themselves in the National Assembly, and their punishment has there and in numerous pieces of diplomatic correspondence (Aktenstuecken) been promised. How extensive the injury suffered by the French treasury from such devices ("Tours de Main") has been cannot be calculated; it appears, however, to have amounted in 1875, to nearly sixty millions of francs. Still more injurious is the effect on the economical relations of the country. Through the enormous premiums the refiner has become the lord of the industry; the sugar market has become centralized, and neither the consumer nor the manufacturer, nor the dealer in sugar can emancipate himself from the monopoly of the refiner.

The following statements concerning the prevalence of the practice of artificial coloration of sugars in France is from the work of N. Basset,* one of the most eminent French authorities on the subject of the sugar manufacture:

On certain frauds practiced in the sugar manufacture.

The French industry, solicitious of its dignity, and perhaps also of its interests, vends its products without subjecting them to fraudulent alterations affecting the nature of the material itself. We have, nevertheless, been able to constitute a fraud prejudicial to the interests of the treasury, and which is sometimes practised under the influence of certain brokers, for the benefit of the refiners. We allude to the mixing of different grades and the artificial coloration of the products, which is practised by certain unscrupulous manufacturers in spite of the surveillance of the agents of the treasury. This fraud has the effect of diminishing the portion of the tax to be paid to the treasury for the reason that, unfortunately, this tax is stupidly based on the color. Very rich sugars badly centrifugated or centrifugated with strongly colored sirups, or sugars mixed with darker sorts with a little molasses or caramel, if need be, fall to the grade of low-taxed sugars, and the public treasury bears the costs of the maneuver. The producer who allows himself to resort to this maneuver does not suffer any depreciation (in the value of the product, *tr.*), for the refiner, his tacit accomplice, buys of him according to the richness.

The fact cannot be denied, and we have personal proofs of it. In all cases this fraud, which is simply a fraud on the revenue (délit de fiscalité), has no importance in relation to the intrinsic quality of the products. * * *

* Guide Pratique du Fabricant de Sucre. Par N. Basset. Paris, 1875, t. III, p. 822. Note D.

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JAN 13 1882
JAMES H. [illegible]

Supreme Court of the United States.

OCTOBER TERM. 1881.

No. 1066.

MERRITT, Collector,

vs.

WELSH AND OTHERS.

BRIEF FOR THE COLLECTOR.

S. F. PHILLIPS,
Solicitor General.

JUDD & DETWEILER, PRINTERS.

Supreme Court of the United States.

OCTOBER TERM, 1881.

No. 1066.

MERRIT, COLLECTOR, *vs.* WELSH AND OTHERS.

STATUTES.

Statutory provisions in this country imposing duties upon sugars begin with the act of 1789, chapter 2, in which the language is:

> "Brown sugars, per pound, one cent;
> "Loaf sugars, per pound, three cents;
> "Other sugars, per pound, two and a half cents."
> 1 Stat., 25.

These denominations were, generally, retained in the fifteen or more tariff acts which followed down to that of 1870, last given below. Other denominations, however, were added, such as "white clayed," and "other clayed or powdered," in the act of 1795, Ch. 17, (1 Stat., 44,) "lump," in that of 1816, Ch. 107, (3 Stat., 312,) "raw, commonly called brown," in that of 1842, Ch. 270, (5 Stat., 558,) and "muscovado or brown" in that of 1861, Ch. 68, (12 Stat., 179.)

Reference to the *Dutch standard in color* as a means of classifying sugars for tariff purposes was first introduced

into the United States by the act of 1861, Ch. 2. That act, and those passed subsequently upon the same subject, are as follows:

"On raw sugar, commonly called muscovado or brown sugar, and on sugars not advanced above number twelve, Dutch standard, by claying, boiling, clarifying, or other process, and on sirup of sugar or of sugar cane, and concentrated molasses or concentrated melada, two cents and a half per pound; and on white and clayed sugar, when advanced beyond the raw state, above number twelve, Dutch standard, by clarifying or other process, and not yet refined, three cents per pound; on refined sugars, whether loaf, lump, crushed, or pulverized, five cents per pound; on sugars after refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, eight cents per pound." (1861, Ch. 2; 12 Stat., 330.)

"On sirup of sugar, or of sugar cane, or concentrated molasses, or concentrated melada, two cents per pound.

"On all sugar not above number twelve, Dutch standard in color, two and one-half cents per pound.

"On all sugar above number twelve, and not above number fifteen, Dutch standard in color, three cents per pound.

"On all sugar above number fifteen, not stove-dried, and not above number twenty, Dutch standard in color, three and one-half cents per pound.

"On all refined sugar in form of loaf, lump, crushed, powdered, pulverized, or granulated, and all stove-dried or other sugar above number twenty Dutch standard in color, four cents per pound: *Provided*, That the standards by which the color and grades of sugar are to be regulated shall be selected and furnished to the collectors of such ports of entry as may be necessary, by the Secretary of the Treasury, from time to time, and in such manner as he may deem expedient.

"On sugar candy, not colored, six cents per pound; on all other confectionery made wholly or in part of sugar, and on sugars, after being refined, when tinctured, colored, or in any way adulterated, ten cents per pound." (1862, Ch. 163, Sec. 1; 12 Stat., 544.)

"On all sugar not above number twelve, Dutch standard in color, three cents per pound.

"On all sugar above number twelve, and not above number fifteen, Dutch standard in color, three cents and a half per pound.

"On all sugar above number fifteen, not stove-dried, and not above number twenty, Dutch standard in color, four cents per pound.

"On all refined sugar in form of loaf, lump, crushed, powdered, pulverized, or granulated. and all stove-dried or other sugar above number twenty, Dutch standard in color, five cents per pound: *Provided*, That the standard by which the color and grades of sugar are to be regulated shall be selected and furnished to the collectors of such ports of entry as may be necessary by the Secretary of the Treasury, from time to time, and in such manner as he may deem expedient.

"On sugar candy not colored, ten cents per pound. On all other confectionery, not otherwise provided for, made wholly or in part of sugar, and on sugars after being refined, when tinctured, colored, or in any way adulterated, valued at thirty cents per pound or less, fifteen cents per pound." (1864, Ch. 171, Sec. 1; 13 Stat., 202.)

"On all raw or muscovado sugar not above number seven, Dutch standard in color, one and three quarter cents per pound.

"On all raw or muscovado sugar above number seven, Dutch standard in color, and on all other sugars not above number ten, Dutch standard in color, two cents per pound.

"On all other sugars above number ten, Dutch standard in color, and not above number thirteen, Dutch standard in color, two and one quarter cents per pound.

"On all other sugars above number thirteen, Dutch standard in color, and not above number sixteen, Dutch standard in color, two and three quarter cents per pound.

"On all other sugars above number sixteen, Dutch standin color, and not above number twenty, Dutch standard in color, three and one quarter cents per pound.

"On all sugar above number twenty, Dutch standard in color, and on all refined loaf, lump, crushed, powdered, and granulated sugar, four cents per pound: *Provided, That the*

Secretary of the Treasury shall, by regulations, prescribe and require that samples shall be taken by inspectors from the hogshead, box, or other package, in such a manner as to represent a true average of the contents of the package, and from a sufficient number of packages of the same mark in each and every invoice, so that the samples on which the classification is made shall be a fair average in *quality of the sugar imported* under that mark, and the classification shall be adjudged on the entire mark accordingly; *and the weights of sugar imported in casks or boxes shall be marked distinctly by the custom-house weigher by scoring the figures indelibly on each package.*" (1870, Ch. 255; 16 Stat., p. 262.)

"On all sugar not above number seven Dutch standard in color, one and three quarter cents per pound.

"On all sugar above number seven, and not above number ten, Dutch standard in color, two cents per pound.

"On all sugar above number ten, and not above number thirteen, Dutch standard in color, two and one quarter cents per pound.

"On all sugar above number thirteen, and not above number sixteen, Dutch standard in color, two and three quarter cents per pound.

"On all sugar above number sixteen, and not above number twenty, Dutch standard in color, three and one quarter cents per pound.

"On all sugar above number twenty, Dutch standard in color, and on all refined loaf, lump, crushed, powdered, and granulated sugar, four cents per pound: *Provided*, That the Secretary of the Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers, in such manner as to ascertain the true quality of such sugar; and the weights of sugar imported in casks or boxes shall be marked distinctly by the custom-house weigher, by scoring the figures indelibly on each package." (1870, Ch. 6; 16 Stat., p. 397.)

This last act has been reproduced in the Revised Statutes; the former part down to the word "Provided," in Section

2504, Schedule G, (p. 468;) the remainder ~~so far as italicized,~~ substantially, in Section 2915. So also the *proviso* contained in the act of 1864 above is now to be found in the Revised Statutes, Section 2914.

"SEC. 3. That on all molasses, concentrated molasses, tank-bottoms, syrup of sugar cane juice, melada, and on sugars according to the Dutch standard in color, imported from foreign countries, there shall be levied, collected, and paid, in addition to the duties now imposed in schedule G, section two thousand five hundred and four of the Revised Statutes, an amount equal to twenty-five per centum of said duties as levied upon the several articles and grades therein designated: *Provided*, That concentrated melada or concrete shall hereafter be classed as sugar dutiable according to color by the Dutch standard; and melada shall be known and defined as an article made in the process of sugar making, being the cane juice boiled down to the sugar point and containing all the sugar and molasses resulted from the boiling process and without any process of purging or clarification, and any and all products of the sugar cane imported in bags, mats, baskets, or other than tight packages shall be considered sugar and dutiable as such." (Statutes at Large, Vol. 18, Act 1875, Chap. 127, Sec. 3, p. 340.)

BRIEF FOR THE COLLECTOR.

As appears from the last quotation above, the rates of duty now imposed upon sugars are generally connected with their color.

he Dutch standard in color is said to be employed by all nations as a standard for commercial purposes.

This standard has been so adopted, because of the reasonably uniform approximate test which color has furnished of the saccharine quality of sugar.

Recently, however, owing to manipulations resorted to in the process of manufacture, or at all events before importation, color has proved to be a very fallacious test of saccharine quality.

The present case concerns such manipulations resorted to *during* the process of manufacture.

Upon the trial below the United States claimed and sought to show that during the process of the manufacture of the sugars in question, a manipulation had been resorted to with the intent and effect to discolor them, at the same time that the stage of saccharine quality previously attained had remained unaffected.

The learned judge below excluded that evidence, laying down as a rule of action for the United States Attorney, that it would be competent for the purposes of the Government to show such discoloration after the point in manufacture had been reached at which sugar, *as commercially known*, is created, butthat previously to that point discoloration was a matter entirely within the discretion of the maker.

This is, in general, the issue upon the record between the

United States and the importers, under several variations of exception: to the exclusion of testimony: refusal of instructions asked for, and: direction to the jury to find for the plaintiffs; but indirectly some further question may arise as to the propriety of the action resorted to by the Government for the purpose of meeting the evasions by it complained of, and as the issue is one affecting in a very important matter the administration of the Treasury, it is hoped that in case it shall appear to the Court that error has been committed upon the trial below, there may also appear good ground for giving some general direction as to the future collection of the duties concerned.

The sugars in question were "vacuum pan centrifugal sugars" (folio 45), imported in 1879, and a certain rate of duty having been imposed thereupon, this was paid under protest, and all formal steps proper to enable the importers to bring suit having been taken, suit accordingly was brought for the alleged excess of duties so exacted; and upon trial, by direction of the Court, the jury found a verdict for the plaintiffs for $5,267.53.

What the Dutch standard of color is, is explained by *Moore*, a witness for the Government, (folios 98, &c.) The general method of applying it at the Custom house is given by *Welsh*, *Smith* and *Remsen*, witnesses for the importers, (folios 42, &c., 53, and 53, &c.) What was actually done by the Government in appraising the sugars in question appears from the evidence of *Hay*, a witness for the importers, (folios 55, &c., read in connection with two circulars of the Secretary of the Treasury, folios 46 and 48.)

The process of manufacturing sugar is stated by *Abbott*, *Collier*, and *Moore*, witnesses for the Government, (folios 60, 80, and 98.)

It is enough to say here that after the cane juice has been expressed and treated with lime to prevent acidification, it is first boiled in a series of open pans until it becomes a syrup, and then, after cooling, evaporated in *vacuum-pans*, which by allowing the syrup to boil at a low temperature prevents the burning and consequent discoloration and loss of sugar, which is caused by great heat. After the first charge of syrup has been sufficiently evaporated and crystallized, other charges are successively introduced until the vacuum-pan has been filled with crystals mingled with uncrystallized syrup, or molasses. At each successive charge the crystals formed at the first charge become enlarged. After the mass in the vacuum-pans has been withdrawn, it is suffered to cool, and is then put into a *centrifugator*, by the operation of which the molasses is thrown out, and the sugar remains.

This molasses is again introduced into the vacuum-pan, the result thereof being a lower quality of sugar. And this may be done a third, or even fourth, time, the resulting sugar all the while deteriorating in quality.

The highest quality of sugar produced by the vacuum-pan centrifugating process is No. 20 Dutch Standard, a nearly white and pure raw sugar.

The color of sugar varies to some extent with the season, (whether wet or dry,) and is affected also by the character of the soil on which the cane has been raised, and also by accidents, or want of skill in the course of manufacturing.

The common method of applying the Dutch Standard is as follows:

Samples of sugar representing its various numbers are prepared in bottles in Holland, and sent in trade all over the world. In practice, these numbers run from 20 down to 7. Upon an importation a sample of sugar from a hogshead or other package is placed in a similar bottle, and held up with the standard in a good light. It thus appears by sight whether the importation is, or is not, above a certain number.

Normally, this color depends upon the greater or less freedom of the mass from molasses.

Ordinarily then, color indicates the market value of the article, which depends (especially as raw sugars are now imported to be refined before they are consumed) upon the amount of pure crystals that may be obtained from a given quantity, or, in other words, upon its saccharine strength.

The Government, however, having good reason to believe, as has been said above, that of late *manipulation* has been resorted to for the purpose of depriving *color* of this quality, so that a sugar may pass as low grade at the custom house, but upon being withdrawn for consumption be recognized as of high grade at a refinery—in order to meet this evasion has drawn a distinction betwixt *true color* or *sugar color* (as a thing in contemplation of Congress in 1870 in passing the present tariff act) and *artificial color* caused by willful manipulation; and whenever the latter appears, has resorted to other tests to determine such true color, and therefore saccharine strength. In general, the test has been the *polariscope*, and this was applied to the sugars in question.

For the purpose of developing this line of defense to the present action, the following questions were asked, and

were *excluded,—exceptions* to such exclusions being duly taken.

"*Look at the samples before you, (being samples of the sugar in suit,) and state whether they have a sugar color?*" folio 81.

"*Do these samples differ from the articles commercially known as vacuum pan centrifugal sugars in the United States on December* 22, 1870, *and prior thereto?*" folio 94.

"*On December* 22, 1870, *and prior thereto were or were not the vacuum pan centrifugal sugars of commerce in the United States generally bought and sold with reference to the Dutch standard in color?*" folio 96.

"*On December* 22, 1870, *and prior thereto, were the sugars of commerce colored by artificial process, or did they all have natural colors?*" folio 97.

"*The samples before you being the exhibits in this suit, have they a natural, or an artificial color?*" folio 98.

"*Is the color that the samples in suit show a necessary consequence of the manufacture of vacuum pan sugar?*" folio 102.

Shearer, an analytical chemist in charge of the United States laboratory at the port of New York, having testified that the polariscope affords "the most accurate test for the determination of the percentage of crystallizable sugar known in chemistry," (see also folio 45,) and that he had applied this to the sugars in question, was asked "*what was the result of the polariscope test of the Dutch standard, and the grades of these various sugars according to that test?*" Folio 72.

In order to understand the theory upon which the learned judge below excluded the above evidence and also refused certain prayers for the Government, for instructions to the jury, and finally directed that a verdict should be rendered against the Government,—I append extracts from remarks made by him at an interval during the examination of the

witnesses for the Government, as a guide for the action of the United States Attorney.

"As thus applied [to commercial transactions throughout the world] it [the Dutch standard] was a permanent, conventional rule for grading sugars. The standards do not purport to give the amount of pure sugar in a grade of a given number. This was not the test which they were designed to afford. The object was simply to give a number which would represent a grade of sugar of a particular color. It was a color standard by which the several grades of sugar might be identified. Now, undoubtedly, it did originally represent the quality and intrinsic value of the grade; but it was not adapted to correspond with the changes which might be introduced from time to time in the art of making sugar, by reason of which the intrinsic value and quality of a particular grade became more and more independent in color. So it seems to me that it must be assumed that the Dutch standard was simply intended as a color criterion by which to identify the different grades of sugar. Now, if I am correct in this—and of course I am proceeding now upon an assumption that the evidence will justify the facts I have stated—if I am correct in this, it follows, that when Congress classified sugars according to the Dutch standard they intended simply to classify them according to color, assuming, quite likely, that color represented quality; and at the time when the tariff act now under consideration was passed, undoubtedly color did represent quality much more accurately at any rate than now. And Congress intended to establish a guide for the classification of sugars which might be understood by merchants, by dealers, and by the officials, and they took the commercial classification—the classification which could be made by the eye. Well, now, it seems to me that because it has been found since the classification was adopted, color is no longer an adequate test of quality, but has become a fallacious test, it would be a strained construction of the law to substitute a test which was not within the legislative contemplation at the time the act was passed, because thereby we would substitute an entirely different classification from that which Congress intended at the time of the amendment. Well, then, the

question arises, granting that the color criterion is the only one which the act of Congress recognized, how it is to be determined in the practical application of the act whether a given importation of sugar is of the color of the number corresponding in color with the sample of the Dutch standard? Why, ordinarily, it is to be determined as merchants determine—by a comparison of the article offered for importation with the Dutch standard. But it may occur that the sugar which is offered for importation while apparently of one color is really of a different color. That is to say, that after the product has become the sugar of commerce, and its color has become fixed, and its characteristics established, for the purpose of evading laws imposing duties it may have been artificially colored. It seems to me, that in such a case, it is competent for the officers of the Government to examine the sugar and determine whether the color which it presents to the eye after comparison with the Dutch standard is the real color or a spurious one; and, although I am not entirely clear that the proper construction of the act of Congress does not require me to hold that the officers of the government can make no test but that afforded by the act, yet, entertaining some doubt upon that subject, propose to resolve that doubt in such a way as will best pr tect the equities of the Government, and at the same tim do no wrong to the equities of the importer. And so, rule that it is competent for the defendant in this case t show that the sugar imported does not present its natura color. That is to say, that after it became the sugar c commerce it was artificially colored so that the test woul be between the true color of the various grades and th color of the Dutch standard.

"But I am unable to sanction the position which has been taken on the part of the defence in this case.

"That the Government can go further than that, and show that during the process of manufacture ingredients were put into the sugar for the purpose of imparting an unnatural color.

"The duty is imposed upon sugar of commerce. The test by which it is to be classified is to be applied to the production which has become the sugar of commerce. The manufacturer may make his sugar as he chooses, but for the purposes of this act, imposing duties after it is made, he has no right, for the purpose of importing it into this country,

to disguise the real color which it acquired when it became the manufactured product.

"I don't know that it is necessary at this stage of the trial of the case to express my views more extensively. I think I have already said enough to indicate what my rulings would be upon the various issues which are to be presented, and I trust that counsel will confine their evidence to such questions as, under the ruling I have made, will be competent and pertinent."

In order the better to understand the prayers for instructions made on behalf of the Government extracts will be given from the testimony upon the record.

Abbott, a witness for the Government, was asked:

"At what point in the process of manufacture did the sugar acquire, in your opinion, the color which it now presents?

"(Objected to by the plaintiffs' counsel as incompetent and immaterial.)

"A. After the crystal was formed in the vacuum-pan and before the mass from the vacuum-pan had been drawn off, but after the crystallization—after the sugar is made—before it goes into the centrifugal.

"That said sugars were colored, in his opinion, by coloring matter produced after the crystals were formed in the vacuum-pan before the mass from the vacuum-pan had been drawn off, but after the sugar was made and before it went into the centrifugal machine, and that the color of the sugar had nothing to do with the substance that it was made from; that is, from the cane juice; and that it was his opinion that the color of said samples of sugar was produced by burnt molasses and excessive lime added to the burnt molasses and drawn into the vacuum-pan after the crystals were formed; which burnt molasses was drawn into the vacuum-pan when the sugar was ready to be centrifugated, and that said samples would have a color above No. 7 and not above No. 10, Dutch standard in color, if the ordinary process of manufacturing vacuum-pan sugars had

been observed and all the molasses left in it in the vacuum-pan, and that the samples in question are of sugar thoroughly centrifugated; that is, had been kept in the centrifugal long enough to drive the molasses from it, and that the coloring matter did not leave the sugar in the centrifugal because it was so dense and was fastened on to the crystals in the vacuum-pan."

Collier, a witness for the Government, testified:

"That the samples (of sugar in suit folio 81) were artificially colored, and by the use of the term *artificial color* he testified that he meant sugar which had a color which does not belong to it by any natural process of manufacture; and further, that the vacuum-pan was introduced about forty years ago for the purpose of producing the largest amount of crystallizable sugar with lighter color, and that the colors of the Dutch standard are natural colors belonging to raw sugar." (Folio 82.)

Fertch, a witness for the Government, testified that the color of seventeen samples shown him, "with five exceptions, were unnatural, and put upon the sugars after they had been thoroughly crystallized but half an hour before the sugar was drawn out of the pan, the sugar being kept in the pan half an hour *for the purpose* of giving the coloring matter a tendency to fasten on to the grain so that it would not purge away with the molasses in the centrifugal machine." (Folio 93.)

Moore, a witness for the Government, testified that the coloration of one of the samples of sugar was effected as follows:

"The custom is to boil until the grain is formed, and then supply fresh syrups, when successive depositions of sugar are made on the grains until they are become of a large size. The operation is continued from time to time until

the pan is full of sugar crystals. The dark section of the crystal shows that the first grain was made of a very high colored solution. It shows that when the grain was formed the contents of the vacuum-pan suddenly became dark; that there was then a second deposition of sugar from a comparitively lighter solution, and then a deposition of sugar from a very dark solution. For instance, this effect would have been produced if half the grains had first been formed and the vacuum-pan partially emptied, but before emptying the vacuum-pan a very dark coloring matter had been introduced or caused to form there; on discharging the contents of the pan or trough, a certain increase in the size of the crystals would take place in consequence of the cooling. On the addition of a lighter-colored solution and continued evaporation those first grains would receive a second coating of lighter-colored sugar, and this cooling would continue until the contents of the pan were again darkened, when an external dark color would be produced. I have tested the coloring matter, and do not find that it gives distinctive reaction which would enable me to characterize it and distinguish from a caramel of burnt molasses, and that I found the contents of both samples to be crystallized sugars of a lighter degree of purity, surrounded by a very dark coating which was imparted to it after manufacture in the vacuum-pan before the strike."

The following are the *instructions* asked for on behalf of the Government. They were all refused, and *exceptions* were taken and allowed.

"1. If the jury shall find from the evidence that the true color of the sugar, in suit, as ascertained by comparing them in every respect with the standard selected by the Secretary of the Treasury and actually used in ascertaining and determining their dutiable character, was not sugar not above number seven Dutch standard in color, they shall find a verdict for the defendant.

"2. If they shall find from the evidence that on December 22d, 1870, and prior thereto, the sugars of commerce were comprised substantially of crystallized sugar and mo-

lasses, and that the color of the different grades of such sugar was produced by molasses, the highest grades being No. 20 Dutch standard in color, having no molasses in them, and the lower grades being 16, 13, 10, and 7, Dutch standard in color, having molasses in them, each of the lower grades having more molasses than the other, so that the greatest quantity of molasses was contained in the lowest grades.

And if the jury shall also find from the evidence that the sugars in suit were not generally known as the sugars of commerce in December 22, 1870, and prior thereto, and that their color at the time of importation was not produced by molasses, but was produced by the introduction of some foreign substance after the sugars were made for the purpose of giving to them a color darker than their true color.

And if the jury shall also find from the evidence that the true color of said sugars is different from its apparent color, and that the true color of said sugars at the time of their importation was above No. 7 Dutch standard in color, they shall find a verdict for the defendant.

"3. If the jury shall find that the sugars were colored with burnt molasses and were manufactured prior to the time when the burnt molasses was introduced into the vacuum-pan, and that the same was so introduced into the pan merely for the purpose of producing a dark surface-color upon the sugars, so that the sugars, the true color of which was above No. 7, Dutch standard in color, appeared to the eye by comparison with the Dutch standard in color to be sugars not above No. 7, Dutch standard in color, and shall also find that the true color of the sugar when it became manufactured was above No. 7 Dutch standard in color, they shall find a verdict for the defendant.

"4. If the jury shall find from the evidence that the Dutch standard consists of sugars in which the color indicates the grade of the sugar, and shall also find that the color of the samples in suit does not indicate at all the grades of the sugar, but that the sugars in suit are, in fact, of a high grade, say No. 16, as indicated by the Dutch standard, but have a surface color of the lowest grade, say not above No. 7 Dutch standard in color, which surface-color was imparted to it after the crystals of sugar were found in the

the pan is full of sugar crystals. The dark section of the crystal shows that the first grain was made of a very high colored solution. It shows that when the grain was formed the contents of the vacuum-pan suddenly became dark; that there was then a second deposition of sugar from a comparatively lighter solution, and then a deposition of sugar from a very dark solution. For instance, this effect would have been produced if half the grains had first been formed and the vacuum-pan partially emptied, but before emptying the vacuum-pan a very dark coloring matter had been introduced or caused to form there; on discharging the contents of the pan or trough, a certain increase in the size of the crystals would take place in consequence of the cooling. On the addition of a lighter-colored solution and continued evaporation those first grains would receive a second coating of lighter-colored sugar, and this cooling would continue until the contents of the pan were again darkened, when an external dark color would be produced. I have tested the coloring matter, and do not find that it gives distinctive reaction which would enable me to characterize it and distinguish from a caramel of burnt molasses, and that I found the contents of both samples to be crystallized sugars of a lighter degree of purity, surrounded by a very dark coating which was imparted to it after manufacture in the vacuum-pan before the strike."

The following are the *instructions* asked for on behalf of the Government. They were all refused, and *exceptions* were taken and allowed.

"1. If the jury shall find from the evidence that the true color of the sugar, in suit, as ascertained by comparing them in every respect with the standard selected by the Secretary of the Treasury and actually used in ascertaining and determining their dutiable character, was not sugar not above number seven Dutch standard in color, they shall find a verdict for the defendant.

"2. If they shall find from the evidence that on December 22d, 1870, and prior thereto, the sugars of commerce were comprised substantially of crystallized sugar and mo-

lasses, and that the color of the different grades of such sugar was produced by molasses, the highest grades being No. 20 Dutch standard in color, having no molasses in them, and the lower grades being 16, 13, 10, and 7, Dutch standard in color, having molasses in them, each of the lower grades having more molasses than the other, so that the greatest quantity of molasses was contained in the lowest grades.

And if the jury shall also find from the evidence that the sugars in suit were not generally known as the sugars of commerce in December 22, 1870, and prior thereto, and that their color at the time of importation was not produced by molasses, but was produced by the introduction of some foreign substance after the sugars were made for the purpose of giving to them a color darker than their true color.

And if the jury shall also find from the evidence that the true color of said sugars is different from its apparent color, and that the true color of said sugars at the time of their importation was above No. 7 Dutch standard in color, they shall find a verdict for the defendant.

"3. If the jury shall find that the sugars were colored with burnt molasses and were manufactured prior to the time when the burnt molasses was introduced into the vacuum-pan, and that the same was so introduced into the pan merely for the purpose of producing a dark surface-color upon the sugars, so that the sugars, the true color of which was above No. 7, Dutch standard in color, appeared to the eye by comparison with the Dutch standard in color to be sugars not above No. 7, Dutch standard in color, and shall also find that the true color of the sugar when it became manufactured was above No. 7 Dutch standard in color, they shall find a verdict for the defendant.

"4. If the jury shall find from the evidence that the Dutch standard consists of sugars in which the color indicates the grade of the sugar, and shall also find that the color of the samples in suit does not indicate at all the grades of the sugar, but that the sugars in suit are, in fact, of a high grade, say No. 16, as indicated by the Dutch standard, but have a surface color of the lowest grade, say not above No. 7 Dutch standard in color, which surface-color was imparted to it after the crystals of sugar were found in the

vacuum-pan at a time when the boiling of the sugar was completed, they shall find a verdict for the defendant.

"5. The surface or external color of the sugars in suit was not necessarily the color by which their dutiable character was to be ascertained, but the true color of the sugars in suit, as ascertained by comparison with the standard which was in use by the collector and was actually used for the purpose of ascertaining the dutiable character of the sugars in suit, was the color to guide him in ascertaining and levying duties upon them.

"6. If the jury shall find from the evidence that the surface or external color of the sugars in suit was produced by the introduction of a foreign substance at a time subsequent to the manufacture of sugar, and shall also find from the evidence that when said foreign substance is removed from the surface of said sugars, that they have not a color of sugars not above No. 7 Dutch standard in color, but do have a color of sugars above No. 7 Dutch standard in color, they shall find a verdict for defendant.

"7. For tariff purposes centrifugal sugars are required to have a color obtained by the process of manufacture without the introduction of any foreign substance in the process of manufacture for the purpose only of obtaining a darker color than that which the sugars would have obtained in the natural process of manufacture.

"8. If the jury shall find from the evidence that a foreign substance was introduced into the sugars in suit during the process of the manufacture which made them darker in color than they would have been but for the introduction of such foreign substance, and shall also find from the evidence that but for the introduction of said foreign substance the apparent color of the sugars in suit would not have been that of sugars not above No. 7 Dutch standard in color, but would have been of a higher grade, they shall find a verdict for the defendant.

"9. The jury may examine the samples of the sugars in suit, and themselves compare them with the sugars of the Dutch standard; and that if the jury find as a matter of

fact that the sugars in suit are not of the color of any of the colors of the Dutch standard, they may find as a matter of fact whether the defendant erred in his classification.

"And that if they find the collector did classify the sugars in suit according to their true color from the best means in his control they may find for the defendant.

"10. Sugar is above No. 7 Dutch standard in color, within the intent of the statute if it be above that number when reduced mechanically to the same fineness and packed in the same manner as such standard.

"11. Sugars composed of crystals larger than those of the standards furnished by the Secretary of the Treasury may properly be reduced to the same fineness as those of such standards, and packed in bottles in the same manner for comparison with such standards, in order to determine the color or classification.

And thereafter, and before the issues were submitted to the jury, counsel for plaintiffs made a motion to the court to direct the jury to find a verdict in favor of the plaintiffs and against the defendant for the sum of $5,267.53, and the court then and there refused to charge the jury as requested by counsel for the defendant, and refused to submit any question of fact to the jury, but directed the jury to find a verdict in favor of plaintiffs and against the defendant for the sum of $5,267.53, and the counsel for defendant then and there excepted to each and every of the rulings of the court, which exceptions were then and there noted and allowed by the court."

For *error* is assigned the *exclusion* of the following questions:

1. Whether the samples had a sugar color? (Folio 81.)

2. Whether the samples differed from the articles known

as vacuum-pan centrifugal sugars in the United States on December 22, 1870, and prior thereto. (Folio 94.)

3. Whether such vacuum-pan centrifugal sugars were or were not generally bought and sold in the United States on December 22, 1870, and prior thereto, with reference to the Dutch standard in color. (Folio 96.)

4. Whether on December 22, 1870, and prior thereto, the sugars of commerce were colored by artificial process or had, all of them, natural colors. (Folio 97.)

5. Whether the samples had a natural or an artificial color. (Folio 98.)

Also: 6. The instructions given by the learned judge expressly as a guide by which the counsel for the Government were to conduct the trial, especially his refusal of permission to show that artificial means were resorted to to impart color to the sugars *during the process* of manufacture. (Folios 79 and 95.)

7 to 18. The refusals to give the instructions asked for as above by the Government. (Folios 103, &c.)

19. The direction to the jury to find a verdict for the importers. (Folio 112.)

These numerous assignments involve mere variations of what is the one substantial issue between the parties, as first stated above, viz: whether vision exercised upon samples of sugar in the condition in which it was imported (11th request, folio 111,) placed in juxtaposition in a good light

with sugars representing the various numbers of the Dutch standard in color, is the only test for duties upon sugars; or whether the Government may correct that result in any case by showing the color to be not a true sugar color, but due to artificial processes introduced during manufacture, *not* in order to increase the quantity or quality of the product, but on purpose to discolor.

The theory of the learned judge below was, that artificial discolorization might be shown by the Government if effected *after* the sugar of commerce had been produced, but not where effected before. (See above.)

In this court, of course, the importers may disown any *admission* thus incidentally made, and may defend the rejection of the evidence tendered, and of the instructions prayed for, upon what they may regard as higher ground than that thus taken.

I.

In the first place I submit that upon the face of the expression, "*Sugars not above No. 7 Dutch standard in color, one and three-quarters cents per pound*," contained in the above act of 1870, there is nothing to indicate the *method* by which it is to be ascertained that *sugar* is of the class specified. Upon referring to the whole provision it will be seen also that there is no context therein to supply such deficiency. The expression "*No. 7 Dutch standard in color*" is a term of art in commerce which requires oral explanation; and which in that way is found to designate a sugar known by its color to be of a certain saccharine strength. The important quality, of course, is the saccharine strength. As to the color, it must be a color which is by natural ne-

cessity associated with saccharine strength,—approximately, at least,—according to certain rules which find their expression in the scales of numbers exhibited by the Dutch standard in colors.

If "No. 7 Dutch standard in color," signifies *by means of color* a certain saccharine strength, and if courts can take notice that duties upon sugars are laid with reference to their values which depend upon their saccharine strength, then, in the absence of a statutory method for comparing importations of sugar with the sugars which in practice represent the standard, it seems that color is not the *exclusively appropriate* method of making such comparison. It may be a convenient method, and that which Congress supposed would ordinarily prevail; but in case a sugar presented for comparison were of an exceptional color,—*i. e.*, of any color but a true sugar color,—what is there in the words of the statute to prevent an application of any other method for ascertaining its relation to that which is of the essence of such *No.* 7, I mean its saccharine strength? Why is not this one of those numerous instances foreseen by Congress, in which the Secretary of the Treasury, being charged with *superintending the collection of the revenue, shall prescribe such regulations, not inconsistent with law, for carrying out the provisions of law relating to raising revenue from imports, or to duties on imports.* (Rev. Stat., secs. 248 and 251.)

I submit that there can be no doubt that Congress has not laid down any rule, *much less any cast-iron rule*, for effecting the comparison in question; and although it be true that parole testimony applied to the phrase quoted above will discover that the Holland plan, of putting up sugar in bottles, &c., is the only plan by which the *standard* in question can

be ascertained, yet information given by the same sort of testimony as to the *method* by which that standard is applied in Holland or elsewhere, does not impose upon the Secretary a rigid duty of adopting such method. Congress has been inexorable as to the standard, but has left the method of its application to reasonable discretion. A very great excellence in the standard was its employment of color, a matter which of course suggested that in its application color would be easily compared with color; but as, after eighty years of customs experience, Congress was aware how subject such a superficial quality would be to fraudulent manipulation, (*ne nimium crede colori,*) it chose to leave the practical administration of this standard to the discretion of the Secretary. The "regulations not inconsistent with law," above referred to, are regulations of practical matters as to which the law may be silent; matters, therefore, like the present.

The contention upon the part of the Government certainly accords with abstract justice, for there can be no doubt that Congress intended to grade the duties directly according to the quality of the sugars, and what the Secretary has done looks to an enforcement of such intention. It is entirely true that the importers are entitled to any pound of flesh which the letter of the statute in question may have given them. That is freely conceded. My argument is that, closely considered, the statute has no "letter" to the effect supposed; and that good reasons may be suggested for its absence.

The case which the Government sought to establish, and was prohibited from establishing, was one of a *deceit* by the

makers of the sugar to which the importers were accessory after the fact. The particular case may be novel, but the class to which it belongs is at least as old as the transaction of Jacob and his Mother in the matter of the "blessing." If the evidence offered by the Government had been believed, the sugars were colored for fraudulent gain; and were in no true sense of a grade *lower than number seven.* The cent or more per pound which the Government lost was, of course, so much *made* by the importers and makers, or between them. The case is the same as if the sugars had been colored in order to obtain a higher price from some private purchaser. The affirmation by the importers at the Custom-house, and now (see protests, record, pp. 12, &c.,) the foundation of this suit is in point of substance untrue, and the Government had the same right to reject the goods when offered for entry as of that quality, that a private party to an executory contract has in case of a tender of goods that only apparently conform to the terms of such contract.

An act done upon purpose to pass for the sake of gain a sugar of one quality off as and for a sugar of another quality is, of course, fraud. The party who is guilty of it, as accessory or otherwise, cannot estop the party injured by mere words, statutory or other. Fraud sets everything at large for every purpose of pursuing the perpetrator. He is in the situation of one having "taken the sword." That the learned judge below should have prevented the Government from proving the *mala fide* practices under which these sugars had been made to present, *prima facie*, some rude colorable likeness to sugars of low grade, seems contrary to a long and well-established line of familiar precedents in such cases.

II.

Although pure sugar is colorless, yet during the process of eliminating it from the various products of the cane in connection with which its principle exists in nature, *color is necessarily evolved*, which, attaching itself to the crystals of sugar, or being in juxtaposition therewith, is communicated to them, and gives to raw sugar of commerce the name of *brown* (in its various shades).

It is color so imparted which is spoken of in the record as "sugar color," and "true color."

And upon this necessary color is founded the theory that is reduced to practice in the "Dutch standard in color," as applied to raw sugars.

I submit that it appears upon the face of the statutes quoted above that Congress has assumed that this is a *specific sugar color*, and that there is no reason for thinking that it has authorized any other color in nature to be identified with and substituted for it by the custom-house officers. The language of Congress has inextricably involved the color with the substance from which it proceeds, so that it would be a violation of law for collectors, &c., to substitute for standard bottles of sugar bottles of *sand* apparently of such shades of color, or *paintings* representing apparently such shades. *Quod dixit voluit*—so that color actually proceeding from sugar is *exclusively* the standard.

It follows, in like manner, that for the various *numbers* of the Dutch standard must be presented colors proceeding from sugars of *such and such a character or grade*. No other grade of sugar and no other substance in nature can supply their place.

I submit it as probable that to an accurate and refined vision sugar color as above defined would appear to be *sui generis* and not susceptible of being identified with any other color. I venture to suggest this, although it is sufficient to say here that Congress has chosen, for good reason or for no reason, to set apart sugar color as the only color in the world for its purposes at the custom-house.

In the same way it follows that Congress intended that *the color to be brought to the standard thus set up must itself be a sugar color*. The standard and the article compared therewith must in the nature of things be *commensurable*. As no *red* or *blue* can be brought to the standard of sugar color, so, in point of principle, equally, cannot any other than a true sugar color. This conclusion may not be so plain to the senses, but in point of reason it seems to be quite clear.

The evidence, as has been already said, shows that pure sugar is colorless.

It follows that the color which any particular sugar of commerce may have is derived from some *foreign* substance. Again, if that foreign substance be one necessarily evolved in the sugar-making process, the color which it imparts to the sugar is, *pro tempore*, a necessary color.

In this connection, I submit that there is a *natural* process for the elimination of sugar; a process in accordance with the laws of nature, that although not deprived of that title by want of skill in carrying it on, or by accidents incidental thereto, is incompatible with variations therefrom, at any stage thereof, *if conceived and executed of purpose to secure some other end than that of eliminating sugar*.

If one were to add to the contents of the vacuum-pan a brown aniline pigment, I suppose that it is not doubted that

the resulting color would be one that could not be brought to the Dutch standard; that it would be a color not intended by Congress. What is the difference betwixt this case and any other in which foreign material is added with like purpose? Is there any difference betwixt such case and one in which the added foreign material has been derived from the sugar cane itself? It the purpose wilfully to color the sugar by an extraordinary step resorted to in the process of manufacture be allowable, what limit can be put upon the choice of means (at least amongst those otherwise innoxious) to effect it? And upon the other hand, if in any such case the choice actually exercised be not allowable, will that not go upon a principle equally incompatible with all *purposed* discoloration.

Evasions of a law test its principle. I submit, therefore, that the warning, *qui hæret in litera hæret in cortice*, requires for the interpretation of the statute before the court consideration of all surrounding circumstances; and that thereupon it will appear that Congress must have assumed the existence of a normal proceeding in sugar making, a proceeding not inconsistent, as has been already said, with blunders in the workmen, or with accident imparing the result; but wholly so with a willful mingling therewith of another operation designed to effect a collateral purpose. I also submit that it is of no concern at what time prior to importation the purposed discoloration has been effected. *Jacob* had a way of coloring flocks and herds that may be beyond the attainment of modern skill. But if chemistry now or hereafter devises a method by which at any stage *in the growth of cane*, or *during the existence of the cane juice*, or *of the syrup, or still later*, something extraneous to mere sugar making can be

done to impart what will afterwards result in a false or apparent color in the sugar when become sugar of commerce, thereby disturbing the normal relations betwixt its color and its saccharine quality, I submit that there, equally, Congress did not intend that the Dutch standard should be applied, but has included the case under such general provisions as meet similar frauds upon the custom duties law.

I confess an inability to appreciate the distinction drawn by the learned judge in the court below betwixt an apparent color imparted *after* sugar of commerce has been formed, and such color imparted *before*. That the discoloration was effected after the sugar had been centrifugated may be more plainly fraud, or at least stronger evidence of fraud, but granting that what was done was done willfully, it seems that the principle upon which it is to be treated is not affected by the distinction drawn by his Honor.

III.

The difference betwixt an artificial discoloration and a true sugar color of like grade is shown by the comparatively slight amount of the former which effects the purpose. If sugar affected by the former be ground up, the true color, or very nearly that, is immediately revealed. If the sugar in question be ground, for instance, to the fineness of that of the Dutch standard, that result will follow. The artificial color, generally a very thin coating burned upon the surface of the crystal, being mixed with the mass of the crystal loses its first effect.

Although ordinarily imported sugars be not required for custom house purposes to be reduced to the fineness of that

in the Dutch bottles, yet upon principles which ordinarily affect the color of smooth or rough surfaces, it seems that the Government has a reserved right to demand that it shall be done; and therefore I submit especially that the rejection of the *eleventh* prayer for instructions was erroneous.

The other prayers, as well as the rejection of testimony, and the direction to the jury, are believed to fall within the general line of the argument just submitted.

S. F. PHILLIPS,
Solicitor General.

[I beg leave to submit herewith for the information of the Court an interesting and valuable Statement relative to the Artificial Coloring of Imported Sugars, heretofore prepared by *Dr. Gideon E. Moore*, at the instance of the Department of the Treasury.]

JAN 12 1882

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, 1881.

EDWIN A. MERRITT, COLLECTOR, &C.,
Plaintiff in Error,

vs.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, JR., OSGOOD WELSH, JOHN L. WELSH AND BENJAMIN PERKINS,
Defendants in Error.

No. 1066.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF NEW YORK.

BRIEF IN BEHALF OF DEFENDANTS IN ERROR.

Burgoyne, Law Case Printer (Law Telephone 587), 29 Rose Street, N. Y.

Supreme Court of the United States.

EDWIN A. MERRITT, Collector &c.,
Plaintiff in error,

vs.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, JR., OSGOOD WELSH, JOHN L. WELSH and BENJAMIN PERKINS,
Defendants in error.

October T., 1881.
No. 1066.

Brief for Defendants in Error.

STATEMENT.

This action was brought to recover an alleged excess of duties exacted by the defendant as Collector of the Port of New York, on five cargoes of sugar imported from Cuba in 1879. Both parties claim that the goods were dutiable under § 2504 of the Revised Statutes, Schedule G., page 468, and § 3 of the Act of March 3, 1875, 18 Stat. at Large, 340. So much of Schedule "G." as is pertinent to this case is in the following words: "Sugar not above number seven, Dutch standard in color: one and three quarters cents per pound.

Sugar above number seven, and not above number ten, Dutch standard in color: two cents per pound.

Sugar above number ten, and not above number thirteen, Dutch standard in color: two and one quarter cents per pound."

A duty of twenty-five per cent. additional to these several rates was imposed by the Act of March 3, 1875.

On the trial it appeared that the Dutch Standard referred to in the tariff, is a color standard, recognised and used all over the world.

That it is put up in Holland, under the direction of the Dutch Trading Company. That it is made of different colored sugars

which are mixed until certain colors are obtained, and then the sugar is put in glass bottles and sealed, and the bottles labelled and numbered from No. 5 to No. 20. The darkest color is of the lowest number, and they gradually grow lighter from the lowest to the highest.

The mode of using the standard is to place a sample of the sugar to be classified in a glass bottle and compare it by the eye with the Dutch standard. Sugar corresponding in color to the color of one of the Dutch standards, is said to be a sugar of the number of that Dutch standard. This has been the sole method of determining the color of sugar by the Dutch standard for the purpose of classification under the tariff acts until the 19th day of July, 1879. Among merchants and importers in the sugar trade, the color of sugar by the Dutch standard has been always determined in the same way. (Record, pp. 14, 17, 18, 32, fols. 43, 52, 54, 98.)

On the part of the plaintiffs it was uncontradictedly proven that, examining and comparing their sugars in this manner with the Dutch standard in use among the merchants and at the Custom House, portions of each importation in controversy were not above No. 7, Dutch standard, in color, and that the Collector exacted and the plaintiffs paid in some cases the rate of duty applicable to sugar above No. 7 and not above No. 10, and in other cases the rate applicable to sugar above No. 10 and not above No. 13, Dutch standard, in color, and in one instance the sugar was, by the Dutch standard, not above No. 10, and the Collector exacted the duty applicable to sugar above No. 10 and not above No. 13, Dutch standard (Record, pp. 11 and 19).

As to all these sugars, the result of the testimony of the examiner at the Custom House was that their color, by the Dutch standard, was not above No. 7, except in the before-stated instance, when it was No. 10, and the duty applicable to No. 13 was exacted; and he produced the official record made at the time of his examination (Record, p. 18, fol. 54).

It further appeared that the sugars, in respect to which the controversy arises, were all finally classified for duty, and the duties assessed in accordance with an order from the Treasury Department, dated September 2, 1879, the substantive portion of which is as follows:

"In view of the foregoing and of the provisions by which

such quality is measured by the Dutch standard in color, officers of the customs are hereby instructed that all sugars the apparent color of which, as imported, is not above No. 7 Dutch standard in color, and which contain over ninety-three per cent. and not over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance shall be classified as No. 7, and not above No. 10 Dutch standard. All sugars the apparent color of which, as imported, is not above No. 10 Dutch standard in color, and which contain over ninety-seven per cent. of crystallizable sugar in one hundred parts of the dry substance, shall be classified as above No. 10 and not above No. 13 Dutch standard" (Record, pp. 16, 17, fols. 49, 50).

The entire circular, with one of July 19, 1879, the cause of this controversy, is set out at length on pages 15, 16 and 17 of the Record.

It was not denied on the trial that the goods in question were *sugars of commerce*, and were of the particular variety known as *vacuum pan centrifugal sugars*. One of the plaintiffs also testified, and this was not subsequently controverted:

"The sugars in question were not received by us from the planters, but they were consigned to us by merchants in Havana. They were sugars bought in the ordinary way of doing business by merchants in Havana and consigned to us. I have made efforts to ascertain through how many hands they had passed with the view of tracing their history and places of manufacture, but am not able to do so. I cannot tell through whose hands they passed between the estate and the particular merchant in Cuba who consigned them to us."

The plaintiffs also proved their protests and appeals, and the suit was commenced in due time. No question was raised at the trial as to their sufficiency or as to the amount claimed to have been overpaid. The plaintiffs thereupon rested their case.

In the absence of any countervailing testimony the plaintiffs on these facts were entitled to a verdict.

On the part of the defense it was not sought to controvert the facts proved by the plaintiffs, viz., that they had imported sugar which by the ordinary and usual method of comparison with the Dutch standard, were not above the No. 7 of that standard.

The points made in defence, as plaintiffs understand them, were, that sugar becomes sugar as soon as in the process of boiling cane juice crystals of sugar are formed, and that anything done by the manufacturer after this point in treatment of the mass, which operates to keep down the color of the crystals, is in fraud of the United States; and that the right exists to assess duty upon the color which might have resulted if the doing of these acts had been omitted.

The claim of the plaintiffs then and now is that it is not competent under existing laws for officers of the customs to inquire into methods of manufacture with a view to the assessment of duty, but it being conceded that the article imported is a sugar of commerce and has not been sophisticated since its manufacture, the sole test for its dutiable classification is color by comparison with the Dutch standard; which comparison is to be made in the method known to merchants and practiced by the government from 1861 to 1879.

The following is a resumé of the evidence on the part of the defence as disclosed by the record:

Mr. Hay, the appraiser, did not personally examine the sugars, but wrote on the invoice the classification according to which the duties were exacted, from the memoranda made by Mr. Remsen, who examined them by the Dutch Standard, and from the books of an examiner who made a polariscopic test, in pursuance of two circulars issued by the Treasury Department, dated July 19 and September 2. By the first circular the Secretary instructed the Collector to classify all sugars containing ninety per cent., and not more than ninety-four per cent. of crystallizable sugar as above number seven Dutch Standard in color, notwithstanding the color was below number seven, and to classify all sugars containing more than ninety-four per cent of crystallizable sugar as above number ten, Dutch Standard, notwithstanding its color was below number ten.

The second circular is the one of Sept. 2, before quoted.

It appeared, however, *that all the sugars in question were finally classified for duty in accordance with the latter circular* (Record, p. 18, fol. 56).

The returns of the appraiser were then put in evidence for the purpose of showing the action of the Government (Record, pp. 19 and 20, fol. 56–59.

These returns show sugar not above No. 7, testing above 93 or 97 per cent. of crystallizable sugar, as liable to duty at 2 and 2¼ cents per pound, and 25 per cent. additional.

See Returns, pp. 19 and 20 of Record.

The process of manufacturing sugar from cane juice was described substantially as follows: After the juice is expressed from the cane it goes into tanks, when some of the impurities are separated from it, usually by the use of lime. The lime is used to neutralize the juice, so that impurities may be separated. Then the juice is boiled down in an open pan, usually to the density of twenty degrees Beaumé. From these pans it is carried to subsiding tanks from which it is drawn into the vacuum pan, and then boiled to the point of crystallization. The vacuum pan is a machine shaped much like an egg and has pipes connected with a pump which exhausts the air from the pan. In the pan are worms or coils through which steam passes. The air being exhausted, the syrup boils at a low temperature and thus forms little coloring matter. Sugar crystallizes in the vacuum pan, and more syrup is admitted as the first is boiled down, and the crystals are built up to the required size. *When the pan is full, the mass is a mixture of sugar and molasses* (Record, p. 21, fol. 61). *This article as it comes from the vacuum pan and unpurged, is an article of commerce and is sold here as "Melado"* (Record, p. 23, fol. 70). It is classified at the Custom House as Melado (Ib.). This melado passes first into coolers, and from them into mixers. The mixer is a horizontal shaft with projecting arms turning in a trough into which the stuff is conducted, and the arms mix up thoroughly the crystals of sugar with the molasses, so that it may purge more easily, and when it is too stiff for purging they put in molasses.

In many instances this is a *necessary process* (Record, p. 28 fol. 86). From the mixer it passes into the centrifugal machine. The centrifugal machine is an arrangement like two tubs. The outside tub is stationary. The inside one is perforated, and situated on a shaft. The mixture from the vacuum pan passes into the inside tub, which is made to revolve, and the

molasses passes out through the orifices and leaves the sugar crystals in the inner tub.

After they have purged out the molasses, if they want to make a lighter sugar they spray water over it in the centrifugal machine, and if they do not want light sugar they omit the water (Record, p. 28 fol. 86).

Molasses is that portion of the evaporated juice of the sugar cane or other saccharine juices, which is not obtained in the form of crystallizable sugar. It is more or less darkened in its color by heat in the process of manufacture. *It is always and inevitably produced in the process of the manufacture of sugar from cane juice* (Record, p. 27, fol. 83).

Mr. Abbott, a special agent of the Treasury Department, gave it as his opinion that plaintiffs' sugar acquired the color it presented on the trial after the crystal was formed, while in the vacuum pan, and before it had passed into the cooler or mixer or centrifugal machine (Record, p. 21, fol. 64). He expressed the opinion that the color was produced by burnt molasses and excessive lime added to the burnt molasses and drawn into the vacuum pan after the crystals were formed (Ib.), and that the samples would have had a color above number seven and not above number ten if the ordinary process of manufacturing vacuum pan sugars had been observed (Ib.); and expressed the opinion that the coloring matter did not leave the sugar in the centrifugal because it was so dense, and was fastened on to the crystals.

Being cross-examined, this witness said:

"When cane is taken from the field, it is first ground in a mill, There are quite a variety of mills. Some squeeze the cane tighter than others, and when they do, they get more juice and more of other matter also. There are upright mills and horizontal mills. I don't know as I could call obtaining juice by one an ordinary process more than the other. The horizontal is more ordinary now than 15 years ago. *The horizontal mills are more used. There has been a change.* The next process in the manufacture of sugar is that the juice goes into tanks and is then clarified by the use of lime. Lime is always added as far as I have seen. *I have found that there are processes where lime is not used. I have not observed the other processes. Potash and magnesia may be used instead of lime. Lime makes the*

sugar lighter and brighter. Lime is used for the purpose of neutralizing the acidity of the juice. If lime is used beyond the point of neutralizing the acidity, it darkens the juice. It takes up the dirt and impurities and prevents crystallization. I have observed the use of lime on perhaps fifty plantations. The practice was not to use lime intentionally beyond the point of acidity. There were differences in the manner in which they used lime on the plantations. In some cases they used it dry as it came from the mill, cold. In other cases they used it in the clarifier when heat was added. In some cases they put it into the juice as soon as it came from the mill, while it was cold. It was used in the clarifiers to clarify in making sugar in the ordinary way, or in the natural way. I have been on plantations where they made sugars in the ordinary way, or in the natural way. I have been on plantations where they made sugar in an unnatural way. In regard to those plantations where I said sugar was made in an unnatural way, after the juice was thoroughly clarified and reduced to about 20 Beaumé, double the quantity of juice was then added and that drawn into the vacuum-pan and boiled. At the time that was added there was cane-syrup there. There was no granulation. Then in the vacuum-pan the syrup was boiled to crystals. No more lime was added after that. I regard that process as an unnatural process of manufacturing sugar. The product of that unnatural process when it came out of the centrifugal machine, after boiling down, was dark sugar. After the liquor was limed in these tanks, or drawn into the vacuum-pan and crystallized, the heat was raised in the vacuum-pan after the pan was boiled ready to strike to about 180 deg. or 190 deg., thereby forming coloring matter by the assistance of the lime or cutting the crystal, burning it on to the crystal. Then it was struck from the pan and purged in the centrifugal, in one instance some ten or fifteen minutes, which brought the color to about 8 or 9, Dutch standard.

There are other saccharine properties in the cane-juice than crystallizable sugar. Invert sugar, sugar that is sour, will not crystallize and goes to make up molasses, and comprises 20 to 30 per cent. of what we call molasses. Therefore, *if lime is not used up to the point where it completely conceals all the acidity in the juice, a portion of the cane-sugar will be lost by being inverted, as the term is, to another crystallization. And when lime is used*

up to or beyond the point of neutrality, you get a larger product than when when sufficient is not used to correct all acidity in the juice. You also get a larger crystal and a crystal of any size you please. It is not abnormal or unnatural to make a large crystal. Large crystals are made by drawing sufficient syrup into the pan and boiling it to a certain density. When you have got all the crystals you can out of the charge you have in the pan, then you draw another charge into the pan and the crystallized sugar in that charge goes on to the sugar that you have just crystallized, and so on, and you can keep up that operation for a week, until you get the crystals of the size of a peanut. *The process of crystallization tends to make nearly pure sugar in the crystals,* by throwing off the impurities, but some coloring matter will be taken up in the crystal. The heat in the vacuum-pan is from 130 deg. to 160 deg. With the assistance of lime the syrup will burn in the vacuum-pan at about 180 deg. *Special processes are sometimes used to lighten the sugar. I do not call them unnatural processes.*

The distinction is this: *If a planter undertakes to make a dark sugar by the application of lime, it is an unnatural process. If he undertakes to make a light sugar by the use of sulphuric acid, or sulphuric gas, that is a natural process.* When the season is rainy and the juice is acid, and they fail to use lime enough to neutralize all the acidity, the product will be of a lighter color and less sugar, so that you may then have a sugar of a high number, Dutch standard, and a low polarization.

All processes of treatment of the sugar after it comes from the centrifugal machine, are processes of refinement, and the same with the process it undergoes in the vacuum-pan in the centrifugal machine. A little water or a little molasses is frequently put into the centrifugal machine to assist in the process of fixing the crystals, and that I think is a process of refinement. *The article, as it comes from the vacuum-pan and unpurged, is an article of commerce and is sold as unpurged sugar, and called melado here.* I never knew the whole mass was classified as sugar at the Custom House until after the Act of 1875 was passed, which provided that it should be classified as sugar. It is generally treated by the Custom House as *melado* when it comes in tight casks, and I have seen it imported in that shape" (Record, pp. 22, 23).

Defendant's witness, Prof. Collier, expressed the opinion that the surface color of the sugar was burnt molasses produced in the vacuum pan, that is, *that the molasses made while the process of boiling was going on may have been burned in the pan, and so have produced the dark color* (Record p. 27, fol. 81).

The witness was of opinion that the plaintiffs' sugars had a color which did not belong to them by what *he considered* to be a natural process of manufacture, that is if a sugar was produced of a dark color when it might have been made of a light color; it was not in his opinion made by a natural process (Record p. 28, fol. 88).

The witness was of opinion that a sugar is artificially colored when the ordinary process of manufacture is departed from with a view to impart color (p. 28, fol. 89).

The witness being cross-examined further testified:

"*In making what I call natural sugar the addition of lime during the process is absolutely necessary, and the quantity that is used will affect both the product and amount, and the color the product, and by the use of lime the producer can determine the color and character of his product. If he uses a less quantity he will get a less crystallized sugar and more of the saccharine properties in an uncrystallized form. If an amount of lime short of the point of neutrality was used, I think the product would be of a light color. If he added lime until the juice was slightly alkaline, he would get the maximum of crystallizable sugar. The tendency of the addition of that amount of lime, particularly if he increased the heat somewhat beyond the ordinary point in the vacuum pan, would be to darken the sugar.*

Q. Supposing the excess of lime was something more than slight?

A. Well, I should say that it was an unnatural process.

THE COURT: No; but what would its tendency be?

A. The tendency would be for that excess of lime in the alkaline to take the glucose instead of sugar, whatever might be present in the syrup, and form dark-colored products, and the extent to which they would be found depends on the length of time and the elevation of the temperature at which this lime was allowed to act on the mass. That explains what I meant to say, that the same process might be pursued with different colors.

Q. You might in that way get a very dark sugar?

A. Within limits; I do not know how dark, because I never tried.

Q. It would not surprise you to find it was darker than No. 7, if they were careful not to purge it too much?

A. Well, I think they might, although I don't know anything about lime, experimentally; I avoid such excessive lime."

A Mr. Firtch testified that in his opinion the color of the plaintiff's sugar was produced during the process of manufacture after crystallization while in the vacuum pan (Record, p. 31, fol. 93).

Mr. Moore testified that in his opinion the color of the sugars was imparted to them while in the vacuum pan, and describes at length the results of his examination of two samples (Record, p. 33, fols. 100, 101, 102).

He also said the grains of sugar in the Dutch Standard are whole grains without pulverization (Ib., fol. 103).

Similar testimony was given by the Government chemist (Record, page 23, fol. 21).

Mr. Ockenhausan testified that on December 22, 1870, and prior thereto, sugars were generally recognized as included in three divisions: clayed sugar, muscovado sugar and centrifugal sugars.

Clayed sugars were boiled in open pans, purged in molds with clay on top, water passing through drives the molasses to the bottom, the upper part of the mold would be white, and gradually darker to the bottom.

Muscovado sugars were also boiled in open pans, but they were purged in the hogshead or cooler, *i. e.*, the molasses leaving the sugars gradually by gravitation (Record, p. 32, fols. 96, 97).

The only testimony as to the polariscope was that one of the plaintiffs being cross-examined said: "In buying and selling sugars the polariscope is used generally to ascertain the quantity of saccharine matter in sugar. The polariscope came into general use within ten years, I think, but I cannot state accurately. Buyers judge by the feeling, smell, color, and by the polariscope test"(Record, p. 15, fol. 45).

And a witness for the Government further testified that the

polariscope was invented about 1847, and is an instrument for the purpose of determining the percentage of crystallizable sugar in *sugar solutions*, and has been in general use in the United States since the year 1870, and that it afforded the most accurate test for the determination of the percentage of crystallizable sugar known in chemistry (Record, p. 24, fol. 72).

No witness was produced who had seen the sugars in question manufactured, or who undertook to express an opinion even that anything had been done to the sugars to affect their color after they had been removed from the centrifugal machine, and only one witness ventured an opinion that anything had been done to the sugars, or any of them, with a view to giving them the color they had after, in the process of manufacture, they had left the vacuum pan.

POINTS.

I.

LEGISLATION AND PRESENT STATUTES.

From 1846 to 1861, duty was assessed upon sugar and other saccharine products according to value. Schedule C of the Act of 1846, enumerating articles dutiable at thirty per cent., *ad valorem*, contained the following enumerations:

"Molasses," * * * "Sugar of all kinds," "Syrup of sugar."

9 Stat. at Large, 46.

This classification and method of assessment, although the rates were changed, remained in full force until 1861. In that year Congress began to change from *ad valorem* to specific duties, and to introduce the color test by the Dutch standard, until at length the duty upon sugar became entirely specific, and the various grades of sugar were determined arbitrarily by comparison of their color to various numbers of the Dutch standard, irrespective of processes of manufacture, commercial designations or value.

Following are the statutes showing this change, being all the legislation in reference to duties upon sugar since 1857 :

ACT OF MARCH 2, 1861.

On raw sugar, commonly called Muscovada or brown sugar, not advanced beyond the raw state by claying or other process; and on syrup of sugar or of sugar cane, and concentrated molasses, or concentrated melado, and on white and clayed sugars, when advanced beyond the raw state by claying, or other process, and not refined, three-fourths of one cent per pound; on refined sugars, whether loaf, lump, crushed, or pulverized, two cents per pound; on sugars, after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, four cents per pound: *provided*, that all syrups of sugar or of sugar cane, concentrated molasses or melado, entered under the name of molasses, or any other name than syrup of sugar or of sugar cane, concentrated molasses, or concentrated melado, shall be liable to forfeiture to the United States; on molasses two cents per gallon.

Act of March 2, 1861; § 5; 12 Stat. at Large, 179, 180.

AUGUST 5, 1861.

On raw sugar, commonly called Muscovado or brown sugar, *and on sugar not advanced above number twelve Dutch standard*, by claying, boiling, clarifying, or other process, and on syrup of sugar or of sugar cane and concentrated molasses, or concentrated melado, two cents per pound; and on white and clayed sugar, when advanced beyond the raw state, above number twelve, Dutch standard, by clarifying or other process, and not yet refined, two and a half cents per pound; on refined sugars, whether loaf, lump, crushed, or pulverized, four cents per pound; on sugars after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar-candy, six cents per pound; on molasses, five cents per gallon:

Provided, That all syrups of sugar or of sugar cane, concentrated molasses or melado, entered under the name of molasses, or any other name than syrup of sugar or of sugar-cane, concentrated molasses, or concentrated melado, shall be liable to forfeiture to the United States.

Act of August 5, 1861, §1, 12 Stat. at Large, 292.

DECEMBER 24TH, 1861.

THIRD. On raw sugar, commonly called Muscovado or brown sugar, and on sugars not advanced above number twelve, Dutch standard, by claying, boiling, clarifying, or other process, and on syrup of sugar or of sugar cane, and concentrated molasses or concentrated melado, two cents and a half per pound; and on white and clayed sugar, when advanced beyond the raw state, above number twelve, Dutch standard, by clarifying or other process, and not yet refined, three cents per pound; on refined sugars, whether loaf, lump, crushed, or pulverized, five cents per pound; on sugars after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, eight cents per pound; on molasses, six cents per gallon: *Provided*, That all syrups of sugar or of sugar cane, concentrated molasses or concentrated melado, entered under the name of molasses, or any other name than syrup of sugar or of sugar cane, concentrated molasses or concentrated melado, shall be liable to forfeiture to the United States, and the same shall be forfeited.

Act of Dec. 24, 1861. Chap. II, 12 Stat. at Large, 330.

JULY, 14, 1862.

On syrup of sugar, or sugar cane, or concentrated molasses, or concentrated melado, two cents per pound;

On all sugar not above number twelve, Dutch standard *in color*, two and one-half cents per pound;

On all sugar above number twelve, and not above number fifteen, Dutch standard in color, three cents per pound;

On all sugar above number fifteen, not stove-dried, and not above number twenty, Dutch standard in color, three and one-half cents per pound.

On all refined sugar in form of loaf, lump, crushed, powdered, pulverized, or granulated, and all stove-dried or other sugar above number twenty, Dutch standard in color, four cents per pound:

Provided, that the standards by which the color and grades of sugars are to be regulated shall be selected and furnished to the collectors of such ports of entry as may be necessary, by the Secretary of the Treasury, from time to time and in such manner as he may deem expedient;

On sugar candy, not colored, six cents per pound; on all other

confectionery, made wholly or in part of sugar, and on sugars, after being refined, when tinctured, or colored, or in any way adulterated, ten cents per pound;

On molasses, six cents per gallon:

Provided, That all syrups of sugar or sugar cane, concentrated molasses or concentrated melado, entered under the name of molasses or any other name than syrup of sugar, or of sugar cane, concentrated molasses, or concentrated melado, shall be liable to forfeiture to the United States, and the same shall be forfeited.

Act of July 14, 1862, §1, 12 Stat. at Large, 543–544.

JUNE 30, 1864.

On all sugar not above number twelve, Dutch Standard in color, three cents per pound.

On all sugar above number twelve, and not above number fifteen, Dutch Standard in color, three cents and a half per pound.

On all sugar above number fifteen, not stove-dried, and not above number twenty, Dutch Standard in color, four cents per pound.

On all refined sugar in form of loaf, lump, crushed, powdered, pulverized, or granulated, and all stove-dried, or other sugar above number twenty, Dutch Standard in color, five cents per pound. *Provided*, that the standard by which the color and grades of sugar are to be regulated shall be selected and furnished to the collectors of such ports of entry as may be necessary by the Secretary of the Treasury, from time to time, and in such manner as he may beem expedient.

* * * * * * * * *

On sugars after being refined, when tinctured, colored, or in any way adulterated, valued at thirty cents per pound or less, fifteen cents per pound.

* * * * * * * * *

THIRD. On molasses from sugar cane, eight cents per gallon. On syrup of sugar-cane juice, melado, concentrated melado, or concentrated molasses, two cents and a half per pound: *Provided*, that all syrups of sugar or sugar cane, cane juice, concentrated molasses, or concentrated melado, entered under the name of molasses, or any other name than syrup of sugar, or of sugar cane, cane juice, concentrated molasses, or concentrated

melado, shall be liable to forfeiture to the United States, and the same shall be forfeited.

Act of June 30, 1864, Sec. 1, 13 Stat. at Large, 202.

ACT OF JULY 14, 1870.

On all molasses, five cents per gallon.

On tank-bottom syrup of sugar-cane juice, melado, concentrated melado, and concentrated molasses, one and one half cents per pound.

On all raw or muscovado sugar not above number seven, Dutch standard in color, one and three quarter cents per pound.

On all raw or muscovado sugar above number seven, Dutch standard in color, and all other sugars not above number ten, Dutch standard in color, two cents per pound.

On all other sugars above number ten, Dutch standard in color, and not above number thirteen, Dutch standard in color, two and one quarter cents per pound.

On all other sugars above number thirteen, Dutch standard in color, and not above number sixteen, Dutch standard in color, two and three quarter cents per pound.

On all other sugars above number sixteen, Dutch standard in color, and not above number twenty, Dutch standard in color, three and one quarter cents per pound.

On all sugar above number twenty, Dutch standard in color, and on all refined loaf, lump, crushed, powdered, and granulated sugar, four cents per pound: *Provided*, That the Secretary of the Treasury shall, by regulations, prescribe and require that samples shall be taken by inspectors from the hogshead, box, or other package, in such a manner as to represent a true average of the contents of the package, and from a sufficient number of packages of the same mark in each and every invoice, so that the samples on which the classification is made shall be a fair average in quality of the sugar imported under that mark, and the classification shall be adjudged on the entire mark accordingly; and the weights of sugar imported in casks or boxes shall be marked distinctly by the custom house weigher by scoring the figures indelibly on each package: *Provided*, That all syrup of sugar, syrup of sugar-cane juice, melado, concentrated mela-

do, or concentrated molasses entered under the name of molasses, shall be forfeited to the United States.

Act of July 14th, 1870, § 21, 16 Stat. at Large, 262.

ACT OF DEC. 22, 1870.

On all sugar not above number seven, Dutch standard in color, one and three-quarter cents per pound.

On all sugar above number seven, and not above number ten, Dutch standard in color, two cents per pound.

On all sugar above number ten, and not above number thirteen, Dutch standard in color, two and one-quarter cents per pound.

On all sugar above number thirteen, and not above number sixteen, Dutch standard in color, two and three quarter cents per pound.

On all sugar above number sixteen, and not above number twenty, Dutch standard in color, three and one-quarter cents per pound.

On all sugar above number twenty, Dutch standard in color, and on all refined loaf, lump, crushed, powdered, and granulated sugar, four cents per pound:

Provided, That the Secretary of the Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers, in such manner as to ascertain the true quality of such sugar; and the weights of sugar imported in casks or boxes shall be marked distinctly by the Custom House weigher, by scoring the figures indelibly on each package:

And provided further, That all sirup of sugar, sirup of sugar-cane juice, melado, concentrated melado, or concentrated molasses, entered under the name of molasses, shall be forfeited in the United States.

Act of Dec. 22, 1870, Chap. VI., 16 Stat. at Large, 397.

REVISED STATUTES.

Sugar not above number seven, Dutch standard in color: one and three-quarter cents per pound.

Sugar above number seven, and not above number ten, Dutch standard in color: two cents per pound.

Sugar above number ten, and not above number thirteen, Dutch standard in color: two and one-quarter cents per pound.

Sugar above number thirteen, and not above number sixteen, Dutch standard in color: two and three-quarter cents per pound.

Sugar above number sixteen, and not above number twenty, Dutch standard in color: three and one-quarter cents per pound.

Sugar above number twenty, Dutch standard in color, and on all refined loaf, lump, crushed, powdered, and granulated sugar: four cents per pound. But syrup of sugar, syrup of sugar-cane juice, melado, concentrated melado, or concentrated molasses, entered under the name of molasses, shall be forfeited to the United States.

* * * * * * * *

Sugars after being refined, when tinctured, colored, or in any way adulterated, valued at thirty cents per pound or less: fifteen cents per pound.

* * * * * * * *

Molasses: five cents per gallon.

Tank-bottoms, syrup of sugar-cane juice, melado, concentrated melado, and concentrated molasses; one and one-half cents per pound.

§ 2504, Rev. Stat., Schedule G, 468, 469.

The standard by which the color and grades of sugar are to be regulated, shall be selected and furnished to the collectors of such ports of entry as may be necessary by the Secretary of the Treasury, from time to time, and in such manner as he may deem expedient.

Rev. Stat., § 2914.

The Secretary of the Treasury shall, by regulation, prescribe and require that samples from packages of sugar shall be taken by the proper officers, in such manner as to ascertain the true quality of such sugar; and the weights of sugar imported in casks or boxes shall be marked distinctly by the Custom-House weigher, by scoring the figures indelibly on each package.

Ib., § 2915.

MARCH 3, 1875.

That on all molasses, concentrated molasses, tank-bottoms, syrup of sugar cane juice, melado, *and on sugars according to the Dutch standard* IN COLOR, imported from

foreign countries, there shall be levied, collected and paid, in addition to the duties now imposed in Schedule G, section two thousand five hundred and four of the Revised Statutes, an amount equal to twenty-five per centum of said duties *as levied upon the several articles and grades therein designated; Provided*, That concentrated melado, or concrete, shall hereafter be classed *as sugar dutiable according to color by the Dutch standard:* and melado shall be known and defined as an article made in the process of sugar-making being the cane-juice boiled down to the sugar point, and containing all the sugar and molasses resulting from the boiling-process, and without any process of purging or clarification, and any and all products of the sugar cane imported in bags, mats, baskets or other than tight packages shall be considered sugar and dutiable as such. *And provided further*, That of the drawback on refined sugars exported allowed by section three thousand and nineteen of the Revised Statutes of the United States, only one per centum of the amount so allowed shall be retained by the United States.

Act of March 3, 1875, § 3, 18 Stat. at Large, 340.

Examining this legislation we ask the Court to note how, gradually, after Congress commenced the change from ad valorem to specific duties, color by the Dutch standard, became the sole test of the grade or class of sugar to which the different rates of duty applied. In the first statute of 1861 classes were formed by reference to commercial designations, processes of manufacture and degree of advancement. The next Act, seven months later, still retains this method of classification, but supplements it in part by the phrase "*and on sugars not advanced above number twelve, Dutch standard.*" This is the first appearance of the phrase, "Dutch standard," in our tariff Acts.

The next statute, in December of the same year, makes two classifications by the "Dutch standard."

Still advancing, Congress in 1862, makes nearly a complete classification by the Dutch standard, and to leave no possibility of doubt as to what it means by reference to the numbers of Dutch standard, and that it does not refer to the size of the crystals, the amount of crystallizable or non-crystallizable sugar, or to methods of manufacture in comparing the sugar imported with the sugar of the "Dutch standard," it says, "On *all sugar*

not above No. 12, Dutch standard *in color*," and this phase "*Dutch standard in color*" has been repeated in every Act since that time.

The Act of 1864 drops all commercial designations and references to processes of manufacture with a single exception, otherwise referring classification for duty to the *color* test by the Dutch standard.

The Act of July 14, 1870, preserves largely the form of that of 1864, while changing rates, but the Act of December, 1870, and which Act is substantially reenacted in the Revised Statutes, made "*Dutch standard in color*" the sole test for dutiable classification of "*all sugars*," except that all "refined" sugar and sugar above No. 20, Dutch standard in color were enumerated in one class.

This Act classifies for duty all saccharine products in three classes, viz.:

Molasses by the gallon

Melado and similar products by the pound, irrespective of quality or value.

All sugar by the pound, but at varying rates, according to its color by the Dutch standard.

The Revised Statutes repeat this classification.

After providing for sugar, they provide as follows:

"Molasses, five cents per gallon. Tank-bottoms, syrup of sugar-cane juice, Melado, concentrated Melado, and concentrated molasses, one and one-half cents per pound."

In this connection, observe that melado, concentrated melado or concentrated molasses are mentioned as distinct from sugar and distinct from molasses in the various Acts from that of March 2, 1861, to the Revised Statutes.

The Act of 1875 recognizes the same distinctions between saccharine products, re-affirms the classification according to color by the Dutch standard, and increases the existing rates of duty twenty-five per cent.

This last act, by its provisions "that concentrated melado shall hereafter be classed as *sugar dutiable according to color by the Dutch standard*," is an express legislative declaration that by the existing laws the *sugars* (to whose classification the concen-

trated melado is now for the first assigned), are "*dutiable according to color.*" The Dutch standard furnishes simply the discrimination of color, according to which sugars are "*dutiable.*"

II.

Established Principles and Decisions.

"The Congress shall have power to lay and collect taxes, duties, imposts and excises."

Constitution, Art. 1, § 8.

It is fundamental doctrine, established and illustrated by a long line of decisions in this court, that, in laying duties, the language of tariff acts is used in a commercial and popular sense. These acts are addressed to practical men of business and affect them in their daily transactions. Merchants and Manufacturers are entitled to be able to ascertain in advance the duties they will be called upon to pay; and in doing this to interpret the statutes according to commercial usages and understanding.

See—The United States vs. Two-hundred Chests Tea, 9 Wheat., 430.
Barlow vs. The United States, 7 Peters, 404.
The United States vs. One-hundred and twelve Casks, 8 Peters, 277.
Elliot vs. Swartout, 10 Peters, 137.
Curtis vs. Martin, 3 How., 106.
Lawrence vs. Allen, 7 How., 785.
Arthur vs. Cumming, 91 U. S., 362.
Tyng vs. Grinnell, 92 U. S., 467.
Arthur vs. Morrison, 96 U. S., 108.
Arthur vs. Lahey, 96 U. S., 112.
Recknagel vs. Murphy, 102 U. S., 197.

Another principle clearly stated by the Court in 13 How., 282, is equally well established.

"When Congress, in legislating on the subject of duties, has described an article so as to identify it by a given designation for revenue purposes, and this has been so long continued as to impress on it a particular designation as an article of import, then it

must be treated as a distinct article, whether there be evidence that it is so known in commerce or not.

"It must be taken as so known in the sense of the revenue laws, by reason of the legal designation given to it, and by which it has been known, and practiced on at the Custom House."

DeForest vs. Lawrence, 13 How., 274–282.

See also:

Homer vs. The Collector, 1 Wall., 486.
Reiche vs. Smyth, 13 Wall., 162.
Maillard vs. Lawrence, 16 How., 251.
Smythe vs. Fiske, 23 Wall., 374.
Movius vs. Arthur, 95 U. S., 144

From these well-established principles, and from the before recited legislation of Congress we submit these conclusions:

(*a*) That the phrase "sugar" as used in the statutes embraces exactly the article known as sugar in the commerce of this country, no more, no less.

(*b*) That the phrase "Dutch standard" is also used as merchants use it, and if among merchants there is and has been a particular method of using the "Dutch standard," that method and none other must be pursued in classifying sugar for duty.

(*c*) The words "in color" in the statutes in connection with mercantile usage and the cotemporaneous and continued practice at the Custom house must be held as exclusive of all other methods of comparison with the "Dutch standard." In other words, the statute points out color as the criterion in respect to which, and in respect to which alone, the Dutch standard is referred to.

(*d*) It follows that the Secretary of the Treasury has no power to usurp the functions of Congress, and impose duties by means of some other test or methods of comparison than those found in the statutes.

(*e*) That by the distinctions of long continued legislation Congress has recognized sugar, molasses, and sugar and molasses

mixed together as three separate articles of commerce; from which it follows that the "sugar" of our tariff acts is not the whole product of the cane, boiled to the point of crystallization of part of it.

(*f*) This position is in harmony with the testimony in the case as disclosed by the record.

(*g*) In the case of "vacuum pan centrifugal sugars" whatever is done to them before they leave the centrifugal machine is something done in the process of manufacture.

(*h*) The only inquiry is, is the product sugar? If it is sugar, then, since Congress has ceased to classify by methods of manufacture, all inquiry as to how it became sugar is immaterial and unwarranted.

And, finally, our contention is that, so long as the article imported is commercially sugar, received as such by our merchants, who buy and sell and deal in the article here, color by the Dutch standard is the sole test of dutiable classification.

That whatever is that color by the Dutch standard, according to mercantile usage upon the street and in comparison with those standards, that is the Dutch standard in color by which the rate of duty is to be determined.

III.

THE DEPARTMENT CIRCULARS OF JULY 19 AND SEPT. 2, 1879.

The Dutch standard is a color standard pure and simple.

The record discloses the mercantile method to be one of comparison by the eye alone, and that this method alone has been always used at the Custom House until 1879 (Record, fols. 43, 54, 99).

The orders of the Department introduce another element of comparison, a test not found in the statute.

Contrasting the provisions of the statutes and the circular of Sept. 2, 1879, the result may be tabulated thus:

Duties under the Statute.	*Duties by order of the Secretary.*
Sugars not above No. 7, Dutch standard in color, $2\frac{3}{16}$ cents per pound.	Sugars not above No. 7, Dutch standard in color, *containing over 93 per cent., and not over 97 per cent. of crystallizable sugar in one hundred parts of the dry substance,* $2\frac{1}{2}$ *cents per pound.*
Sugars above No. 7, and not above No. 10, Dutch standard in color, $2\frac{1}{2}$ cents per pound.	Sugars above No. 7, and not above No. 10, Dutch standard in color, *containing over 97 per cent. of crystallizable sugar in one hundred parts of the dry substance,* $2\frac{3}{16}$ *cents per pound.*

As the sugars in question were all classified for duty, and duty paid according to the higher rate exacted by the Secretary's order (Record, fol. 56), it follows, if there is no authority of law for the Secretary to make such order, that the duties complained of were illegally exacted.

The Dutch standard, based, as we have seen, on color alone, was an arbitrary standard, having some, but never an accurate relation to the value of sugar. Color was never more than one element in the value of sugar.

"Buyers judge by the feeling, smell, color and polariscope test."

"I never knew that when the Dutch standard in color was adopted as a means of assessing sugars for duty that the color indicated the value of the sugar very nicely. In conjunction with other things it did indicate it approximately, very nearly in some cases, if the sugar was intended for consumption." (Record, fols. 45, 51).

"Nearly all imported sugars are now sold to refiners." (Ib., fol. 51).

Conceding, that for purposes of refining, color is an element of less concern than formerly, and does not represent with as much exactness as it did formerly the value of sugar, the remedy, *if this is an evil*, lies with Congress, in which alone is reposed authority to lay duties.

In his report to Congress in 1877 and again in 1878, the Secretary of the Treasury submitted recommendations for changes in the tariff on sugar. In a memorandum read by him to the Committee of Ways and Means, December 17, 1878, the Secretary thus states these recommendations:

"The Report of the Secretary of the Treasury for 1877, contains the following: "The Dutch Standard is an unsatisfactory basis for the assessment of duty, FOUNDED AS IT IS ON COLOR ALONE, which bears no definite relation to the value of the sugar. If, however, the Dutch Standard is to be retained, it is recommended that the grades be reduced in number, so that there shall be but three rates of duty, one for sugars not above No. 13, one for sugars above 13 and not above 20, and another for all sugars above No. 20, including all refined sugars. Based upon the quantities of the various grades imported during the past two years, the following rates would yield about the same amount of revenue as was collected during that time: Sugars not above No. 13, per pound, 2.38; above No. 13 and not above 20, 3.45; above 20, and all refined sugars, 5 cents. This is inclusive of the 25 per cent. additional duty imposed by the Act of March 3, 1875."

"The recommendation therein made was not acted upon by Congress, and, considering the shortness of the session, the Secretary, on the 13th of February, submitted to the Committee of Ways and Means a recommendation and bill providing for the adoption of the polariscope and establishment of a standard of saccharine strength *in addition to the color standard* for the assessment of duty on sugar. The knowledge acquired by this department as to the practical use of the polariscope led to the belief that it was a test which could be fairly applied in the daily administration of business; but Congress failed to take any action on such recommendation. * * * * *

"If Congress should consider the polariscope test a reliable one this department would have no objections to a retention of the *present rates of duties on sugars by color*, with *the addition of the polariscope as a detective*, inasmuch as the present rates are as nearly ad valorem as can well be established in the shape of specific duties."

Congress having refused to adopt the proposed *changes* in the law, the attempt is made to execute the will of the Treasury Department and *override* Congress.

The circulars directing in substance the use of the polariscop commence:

"It has been decided by the Courts that the term Dutc standard in color, as used in the statutes, means the color of th sugar obtained by the ordinary processes of manufacture a practiced at the time of the enactment of the law adopting suc standard; and that any means used to degrade the color of th sugar during or after the process of manufacture is a fraud upo the revenue."

At the time of the issuing of that circular two cases had been decided, one, United States vs. Cargo of sugar, 3 Sawyer's R. 46. The other, United States vs. 712 bags of sugar, tried in Baltimore, November, 1878, unreported.

In the case reported in 3 Sawyer the charge was that charcoal had been mixed with the sugar *after its manufacture.* Judge Hoffman who presided at the trial draws the plainest possible distinction between coloration after manufacture, which he pronounces culpable, and coloration in the process of manufacture, which he declares to be unexceptionable. We quote from p. 55: "Undoubtedly, while the sugar or while the cane "juice, rather, remain in the manufacturer's hands, he may "omit to take out the impurities, or may put in impurities if he "so desires, for, as yet, it has not become sugar.

"The hue of the sugar—that is, the result of the operation— "will be determined by the degree to which he has abstracted "the impurities or foreign substances from it, or the amount of "such foreign substances he may have introduced into it. "But when it has passed out of his hands, and gone into the "hands of the importer or the merchant, then the hue it has "acquired is the color that Congress had reference to when it "established color as a standard of classification."

In the Baltimore case, the United States District Attorney prayed that the Court would instruct the jury, that if they believed from the evidence that the manufacture was conducted "so as to give the sugar a color similar to that of a low grade of "sugar, and with the object of giving a color so as to be below "No. 10, Dutch standard, and that such coloring process was "conducted not for a *bona fide* purpose of manufacture, but "adopted at the suggestion of the importers, to enable the same "to be imported into the United States at the rate of duty im- "posed on sugar below No. 10, Dutch standard, and that the

"same was imported by the claimants with the knowledge of "such coloring process, and the object thereof; and with intent "thereby to have said sugar passed at such grade of color thus "produced, then the verdict of the jury should be for the "plaintiff."

Judge Giles, in answer to this prayer, said:

"I reject it because I repudiate the principle of law asserted "in it. I am against the whole theory. *I hold that a foreign "manufacturer has a right to make sugar of what color he "pleases.*"

Surely upon a more careful reading of these decisions, the statement above quoted from the Treasury Circular of Sept. 2, 1879, would not have been made.

Certainly, also, the case of Barlow vs. the United States, 7 Peters, 404, was not the authority for that statement.

The whole point of that case was that when Congress said "*refined sugar*" it meant exactly what the merchants, those who dealt in the article, bought and sold as refined sugar. Exactly, as in this case when Congress said "Sugar not above No. 7, Dutch standard in color," it meant just the sugar that the merchants here on our streets understand and take as sugar not above No. 7, Dutch standard in color, in their daily transactions. It meant that, and that alone; and if that requirement is satisfied, if the importation is one that would pass current in the street among the whole trade, importers, refiners, jobbers, among those who buy and sell and deal in sugar, as sugar not above No. 7, Dutch standard in color, there is an end of the inquiry.

See, also, charge of Judge Hoffman in U. S. vs. Sugar, before cited.

By what authority can the Secretary of the Treasury say that if some element unnamed in the statute exists, the color of sugar shall be different from what it appears to be?

As well might he say, and with as much authority, that sugar above No. 13 Dutch standard in color, containing but 80 per cent. of crystallizable sugar in the dry substance, shall be entered and passed at the duty appropriate to sugar not above No. 7 Dutch standard in color.

If a merchant brings in charcoal and sugar and tries to enter it as sugar of a low grade, seize and forfeit it; but if, as Judge Hoffman says in the case before cited, the goods as they were imported would pass between merchant and merchant and fulfil a contract for sugars not above a particular number of the Dutch Standard in color, then, we submit, that the Secretary of the Treasury has no authority and no power arbitrarily, because he finds some other element in them, to say that they are of a higher color.

The suggestion of Judge Hoffman that if there were a duty upon white and black horses, and a higher duty upon a white horse than a black horse, the importer could not paint his white horse black and bring him in at the lower rate of duty is not disputed. It would be a fraud upon the revenue, for which the horse should be seized and forfeited. But there is nothing in our revenue statutes; there is nothing in the long series of decisions by this Court construing those statutes which would prevent the foreign producer from breeding all his horses black, if able to do it. He would have a right to breed black horses and import them black. The sugar planter has a right to stop the process of manufacturing his sugar at any stage of the process, so long as the result is sugar and to so import the article according to its color.

The position of the Government upon this point begs the whole question. It comes to this if the Treasury circular is to be maintained; that a Cuban manufacturer must stop his manufacture with a crystal of a given color and cannot go on to make it of a different color, or must go on and use some of the bleaching processes described in the record; or at least that, if exported to this country, his sugar must be treated at the Custom House as though he had omitted to do what he did, or had done what he chose not to do.

What reason can be assigned, or what inhibition of law can be pointed out why a manufacturer of sugar may not make a crystal of any size, and then of any color he pleases. Lime or heat that is "excessive" for one color is just sufficient for another; and what is the "natural" process to attain one color will not naturally produce another.

Suppose the Secretary of the Treasury in the suggested case of duty upon white and upon black horses, should direct the appraiser to drive all black horses on the track and continue "all horses whose apparent color is black, which on being driven are found to be able to trot a mile in less than three minutes, shall be classified as white horses."

In such a case, would not the illegality of such direction be apparent?

Is it not equally apparent in the introduction of the polariscope in respect to sugar in the absence of any statutory authority and *in the face of the refusal of Congress to confer any such authority* upon the Secretary of the Treasury?

This order being illegal the plaintiffs below were entitled indisputably to recover.

IV.

THE ACTUAL QUESTIONS PRESENTED ON THE TRIAL.

The attempt was made on the trial not so much to defend the legality of the Secretary's order as to show by expert testimony that the sugars in question had been so manipulated as to present to the eye a false or artificial color.

The latitude permitted and the limitations imposed upon the government in this respect are best presented by extracts from the opinion of the presiding judge.

Upon objection by the plaintiffs to proof of the polariscope test of the sugar in question after full argument Judge Wallace said:

"The discussion of the question has taken a broader range than the question necessarily required, and for the present the evidence will be excluded and the defendant may have an exception, but if any evidence is offered which will fall within the ruling which I now propose to make, the evidence will be competent and will be received. Evidence may be given to show what the Dutch standard is.

* * * * * * * * *

The evidence upon the other points must be confined to that

which will tend to show that the color of the plaintiff's sugars was an artificial color, *imparted after the process of manufacture.*

The duty was exacted under color of those provisions of the tariff acts which classify the grades of sugar for duty purposes by numbers according to the Dutch standard in color.

* * * * * * * * *

Now it is of the first importance to determine what is meant by the classification by numbers according to the Dutch standard in color, and to ascertain the meaning of the classification it is necessary to ascertain what the Dutch standard in color is according to commercial signification, or rather, what it was at the time the act was passed under which the duties were imposed. There are certain facts in regard to the Dutch standard—what its origin was, how it was used, what it was supposed to represent—which have already been shown, and there are others which, I assume from the argument of the counsel for the defendant, are not to be controverted; and from these it is to be assumed that the Dutch standard consists of a series of numbers, and each of them stands for a distinct shade of color, as shown by sample sealed in a glass jar, and each number stands for a distinct grade of sugar.

It has been shown, and it is understood not to be disputed, that for a very long period of time the Dutch standard had been used in commercial transactions throughout the world.

The Secretary of the Treasury, in his testimony before the Congressional committee, as read in the argument yesterday, stated that at that time it had been in use for a hundred years, if I remember correctly, and it has also been shown, and I don't understand it to be disputed, that the grade of sugar since the Dutch standard has been used has always been ascertained by comparing its color with that of the various numbers of the standard, the grade of the sugar being fixed by the color of that number of the standard with which it was found to correspond.

As thus applied, it was a permanent conventional rule for grading sugars.

The standards do not purport to give the amount of pure sugar in a grade of a given number. This was not the test which they were designed to afford. The object was simply to give a number which would represent a grade of sugar of a particular color. It was a color standard by which the several grades of sugar might be identified.

Now, undoubtedly, it did originally represent the quality and intrinsic value of the grade; but it was not adapted to correspond with the changes which might be introduced from time to time in the art of making sugar, by reason of which the intrinsic value and quality of a particular grade became more and more independent in color. So it seems to me that it must be assumed that the Dutch standard was simply intended as a color criterion by which to identify the different grades of sugar.

Now, if I am correct in this—and of course I am proceeding now upon an assumption that the evidence will justify the facts I have stated—if I am correct in this, it follows, that when Congress classified sugars according to the Dutch standard they intended simply to classify them according to color, assuming, quite likely, that color represented quality; and at the time when the tariff act now under consideration was passed, undoubtedly color did represent quality much more accurately at any rate than now.

And Congress intended to establish a guide for the classification of sugars which might be understood by merchants, by dealers, and by the officials, and they took the commercial classification—the classification which could be made by the eye.

Well, now, it seems to me that because it has been found since the classification was adopted color is no longer an adequate test of quality, but has become a fallacious test, it would be a strained construction of the law to substitute a test which was not within the legislative contemplation at the time the act was passed, because thereby we would substitute an entirely different classification than that which Congress intended at the time of the amendment. Well, then, the question arises, granting that the color criterion is the only one which the act of Congress recognizes, how is it to be determined in the practical application of the act whether a given importation of sugar is of the color of the number corresponding in color with the sample of the Dutch standard? Why, ordinarily, it is to be determined as merchants determine—by a comparison of the article offered for importation with the Dutch standard. But it may occur that the sugar which is offered for importation *while apparently of one color is really of a different color. That is to say, that after the product has become the sugar of com-*

merce, and its color has become fixed, and its characteristics established, for the purpose of evading laws imposing duties it may have been artificially colored. It seems to me, in such a case, it is competent for the officers of the Government to examine the sugar and determine whether the color which it presents to the eye after comparison with the Dutch standard is the real color or a spurious one; and, although I am not entirely clear that the proper construction of the act of Congress does not require me to hold that the officers of the Government can make no test but that afforded by the act, yet, entertaining some doubt upon that subject, I propose to resolve that doubt in such a way as will best protect the equities of the Government, and at the same time do no wrong to the equities of the importer.

And so I rule *that it is competent for the defendant in this case to show that the sugar imported does not present its natural color. That is to say, that after it became the sugar of commerce it was artificially colored so that the test would be between the true color of the various grades and the color of the Dutch standard.*

But I am unable to sanction the position which has been taken on the part of the defence in this case:

That the Government can go further than that, and show that during the process of manufacture ingredients were put into the sugar for the purpose of imparting an unnatural color.

The duty is imposed upon sugar of commerce. The test by which it is to be classified is to be applied to the production which has become the sugar of commerce.

The manufacturer may make his sugar as he chooses, but for the purposes of this act, imposing duties after it is made, he has no right for the purpose of importing it into this country to disguise the real color which it acquired when it became the manufactured product."

It is submitted that these rulings are as favorable to the government as its officers could ask, under the law.

The whole trial was in accordance therewith.

The amount of crystallizable sugar not being a method of determining color, and there being a total failure on the part of the Government to show that the sugar imported did not present its true color, *i. e.*, "that after it *became the sugar of commerce* it was artificially colored," the Court properly directed a verdict for the plaintiffs.

By so ruling the Judge has presented to this Court the question whether it is competent for the Secretary of the Treasury to determine the color of sugar imported not by comparison with the Dutch standard, but in view of the greater or less lime put in the cane-juice, the greater or less degree of heat used in boiling the juice; the more or less perfect elimination of molasses, or upon a thousand and one other details in the processes of manufacture.

The substantial claims of the Government upon the trial were twofold.

1. That because pure sugar exists only in a crystallized state, the sugar of the tariff acts exists and is in a condition to be classified for duty the moment crystals of sugar begin to form in the boiling juice; and that any process in the manufacture which operates to darken these crystals from the time of their formation is unnatural, and such sugar when it has been separated from the uncrystallizable residuum is artificially colored.

2. That comparison, by color, with the Dutch standard is only one element of comparison, and that fineness of grain, crystallizable sugar, and other elements found in the sugar of the Dutch standard shall also be resorted to to determine the color by the Dutch standard of imported sugar.

The Court below ruled adversely to each of these propositions.

We submit that, stated by themselves, the illegality of each proposition becomes apparent.

The Court permitted the Government, if able, to show artificial coloring after the sugar was manufactured, but the Court properly held that the "vacuum pan centrifugal sugars" of commerce were not that article, while crystals of sugar were forming in the boiling cane juice.

Everything tending to show any manipulation of these sugars after their manufacture would, under the ruling of the Court, have been admitted.

The whole attempt of the defense, after this opinion, was to go round or outside of it.

Failing in the end to give any evidence tending even to show

any change in the sugars after their manufacture, nothing remained for the Court but to direct the verdict as they did.

This direction was right—to hold otherwise this Court must overturn the established principles discussed in the preceding point, and in effect decide:

1. That administrative officers of the Government may direct the employment of tests for ascertaining the duties on sugar not found in the statutes and which tests Congress, though requested by such administrative officers, had refused to authorize.

2. That the Collector having assessed a rate of duty higher than the color of the sugar imported called for, under direction of the Secretary of the Treasury, by applying a test not known to the statutes, may defend his action on other grounds.

3. That chemical analysis, and not the statute and commercial names, shall override and control in the practical business of merchants importing sugar. That the Collector may guess what the color of the crystal was when it first formed in the boiling cane-juice—or determine what processes shall be applied to the crystal before it comes to our markets as a sugar of commerce.

4. It would be to sustain a claim for power in our Treasury officers to determine the amount of lime, the degree of heat, the number of times the centrifugal machine shall revolve; or, in other words, that such officers may say to the sugar maker: "If you use more than so much lime, if you boil at a point beyond such a degree of heat, if you stop your centrifugal before it has made so many revolutions your sugar shall be classified for duty as above No. 10 Dutch standard in color, although in point of fact it is below No. 7."

We do not believe that this Court can sustain such conclusions.

V.

THE DUTCH STANDARD THE SOLE LEGAL TEST FOR THE DUTIABLE GRADING OF SUGAR NOT REFINED.

This proposition has already been incidentally argued. We recapitulate:

It is the only test *named in the statute.*

The method of applying this test is perfectly well settled by commercial usage.

This method is by a comparison of the color of the sugar imported with the different numbers of the Dutch standard until substantial agreement in color is found with one of the numbers of this standard.

If for instance the sugar to be classified for duty is found by such comparison to be of a color lighter than the number seven of that standard, and not lighter than the number ten, it is of that *color* of the Dutch standard and that *grade* for the classification for duty prescribed by the statute as above No. 7 and not above No. 10.

For methods of classification at the Custom House, see Record, pp. 19, 20.

The statute by the use of the term "in color" itself points out how the comparison is to be made. That the earlier statutes referred to processes of manufacture in connection with the Dutch standard is no argument to the contrary. Besides by those statutes the Dutch standard was first applied only to muscovado and clayed sugars, and not to centrifugal, and the language was appropriate to the methods pursued with those sugars.

See Record, first half, p. 32.

It has been argued on behalf of the Government that the term Dutch standard in the statutes means something else, and stress is laid on §§ 2914, 2915 of the Revised Statutes. These sections are printed *ante* p. 17.

The first section only requires the Secretary of the Treasury to furnish the standard by which color and grades of sugar are to be regulated.

This means that the Dutch standard shall be furnished. The record discloses the fact that these standards have to be renewed from time to time, and that they are put up in Holland (p. 14, fol. 43 ; p. 17, fol. 52). This section means simply that the Secretary shall obtain "Dutch standards," the standards named in the statute. It does not mean that he can arbitrarily select polariscopes, or any other standard than the statutory one.

The standard he is to furnish is the one to be used to determine color, *i. e.*, "color" according to it, and "grade," *i. e.*, grade for dutiable classification. The statutes for purposes of assessing duty divide sugar into six different grades. The Dutch standard is divided into numbers running from five to twenty inclusive. Thus we reach the dutiable grade by the color standard which the statute designates.

The other section provides that samples shall be taken so as to ascertain the true quality of the sugar.

Using the polariscope or analyzing the sugar chemically is not "taking samples."

It is of course impossible to compare a whole importation of sugar with the numbers of the Dutch standard. It can only be done by taking samples of it. These samples are simply to be taken in such manner as will fairly represent the whole importation.

A hogshead of sugar standing on end for some days will show darker at the bottom than at the top. Samples drawn either from the top or the bottom, would not represent the "true quality of such sugar." They are to be taken so as to represent this true quality for the sole purpose the Custom's Officers have to do with the sugar, *i. e.*, assessing duty. As this duty is to be assessed by color, samples are to be taken so as to represent the *quality* of *color*.

It is submitted that this is the obvious and true meaning of the section.

VI.

The Intent of Congress.

The intent of a statute may be reasonably inferred from the natural and inevitable effect of it.

The Revised Statutes and the Act of 1875 impose duties on sugar as follows:

Not above No. 7, $2\frac{3}{16}$ cents per pound.

Not above No. 10, $2\frac{1}{2}$ cents per pound.

Not above No. 13, $2\frac{13}{16}$ cents per pound.

Not above No. 16, $3\frac{7}{16}$ cents per pound.

Not above No. 20, $4\frac{1}{16}$ cents per pound.

Refined and above No. 20, 5 cents per pound.

The effect of these rates is to exclude from importation all sugars, except such as must be refined before they are fit for consumption, except the small quantity used in the arts. "Nearly all imported sugars are now sold to refiners" (Record, p. 17, fol. 51).

Sugar above No. 13, Dutch standard, consequently is scarcely ever imported.

We must presume that Congress intended to give absolute protection to our refiners, and to the planters of Louisiana producing sugar for consumption, as against all foreign competition. That to do this, an arbitrary color test was adopted, the effect of which would be to encourage the importation of dark-colored sugars, and also limit importation to such sugars.

It was believed a sufficient revenue could be obtained from this class of sugars, and that refining here could be encouraged by practically prohibiting light-colored sugars.

Is it reasonable to suppose that absolute saccharine strength of sugars was taken into account by Congress when it re-enacted the color test in 1875, and limited importations to sugar fit only to be refined?

VII.

EXCEPTIONS TO THE EXCLUSION OF PARTICULAR TESTIMONY.

Certain specific exceptions to exclusion of testimony may be considered together. The questions were as follows:

"Look at the samples before you and state whether they have a sugar color?" (Record, fol. 81.)

"Q. Do these samples differ from the articles commercially known as vaccuum-pan centrifugal sugars in the United States, on December 22d, 1870, and prior thereto?

"THE COURT: I do not think I understand this question.

"DEFENDANT'S COUNSEL: We think we are entitled to show what was the color of the vacuum-pan centrifugal sugars at the time of the passage of the tariff act, and that such colors were the colors of the Dutch standard.

"THE COURT: You may show that.

"WITNESS: They were all represented by some number of the Dutch standard.

"The question was then repeated.

"THE COURT: Unless counsel for the defendant expect to change their case, as it already appears by evidence, and show that the plaintiffs' importation was artificially colored after it became a manufactured product, it is quite useless to ask these questions. *I shall exclude all evidence which is not offered for the purpose of showing that the color of these sugars was imparted after the process of manufacture.*

"Q. On December 22d, 1870, and prior thereto, were or were not the vacuum-pan sugars of commerce in the United States generally bought and sold with reference to the Dutch standard in color?

"Q. On December 22d, 1870, and prior thereto, were the sugars of commerce colored by artificial process, or did they all have natural colors?

"Q. The samples before you, being the exhibits in this suit, have they a natural or an artificial color?"

Record, pp. 31, 32, fols. 94, 97, 98."

These questions were all immaterial and irrelevant if the rulings of the Court on the main question were correct.

The statement of the Court above quoted relative to the exclusion of these questions shows the propriety of the action of the Court. These questions were not asked with a view of proving anything done to the sugars *after manufacture.*

Their sole office is to give exceptions in another form to the opinion already expressed by the Court.

There was no pretence that the questions were asked with a view of changing the case already made, or of showing that anything had been done to the sugars after they had "become a manufactured product."

VIII.

The Requests to Charge.

Without here repeating these requests, we comment upon them in their order and as numbered in the record.

"First." Record 34, fol. 104.

From the use of the words "in every respect," the jurors must have understood that they and the appraisers might properly make a comparison of other qualities than color possessed by the importations and the standard; in short, that the use of the polariscope was authorized. Otherwise, there was no foundation in the evidence for the request; since it was conceded that the importations were the sugars of commerce, having no darker hue than that they bore when first separated by the centrifugal from the other components of the *massecute* or melado.

The Rev. Stats., Sec. 2504, Schedule G, makes all sugars dutible only by the Dutch standard *of color*. The history of this standard shows that it was erected, and has always been used, *only* as a standard of color. It may be that, when this standard was adopted, the saccharine strength of sugar was more approximately than now, indicated by its color; and this correspondence between strength and color may have induced the adoption of the latter as a standard; nevertheless, it was the latter which was adopted, whatever may have been the reason. The maxim that when the reason fails the law fails, does not apply to recent statutory enactments. For Congress, its will is the reason for its acts; or rather, it is for that body to determine for itself when reason demands a change in the policy of its legislation.

From a pamphlet prepared by Dr. Moore for, and published by, the Treasury Department upon this subject, we learn that Holland and France have both suffered severely in their revenues by adherence to the color test after it has ceased to be an indication of saccharine strength; and that the former country passed a law March 25, 1880, to remedy the defect; a similar statute being proposed and discussed, but not yet enacted, in France.

It does not seem to have occurred to the authorities of either of those countries that the want of such legislation could be supplied by the mere edict of administrative officers.

Reference has been made before to sections 2914 and 2915 of the Revised Statutes.

The first (2914) only authorizes the Secretary to select the standard which is to determine the color and (consequently) the dutiable grade of sugar. The law prescribes the application of the Dutch standard of color. This section authorizes the procurement of the necessary standard. The sugar *must* be graded in accordance with this standard for the purposes of collecting a customs revenue therefrom.

The other section (2915) merely authorizes him to regulate the manner of taking samples; so that the small quantity subjected to actual scrutiny shall be a fair representation of the whole importation.

"SECOND." Record 34; folios 104, 5.

There was not one scintilla of evidence upon which to base the assumption that the jury could possibly find that the importations in question were not generally known as sugars of commerce, this position was not controverted; or, that the color was produced by the introduction of any foreign substance after the sugar was made; hence, the request was properly denied.

"THIRD." Record 35, folio 106.

The third request was rightly refused for the same reason.

As assumed in the second request, all sugar is composed chiefly of crystallized sugar and molasses. By the testimony of defendants' witness, Dr. Moore (Rec. 33, middle), it appears that the imported crystals are formed by successive layers over the original grain, successive supplies of syrups being admitted into the vaccuum pan to form crystals of the desired size. It would be as correct to insist that the manufacture was complete upon the formation of the first molecules as to make this claim with regard to the larger crystals. The manufacturer may, at his will, determine the size of the crystal he will make, and the proportion of molasses that shall remain with the crystals. These details are but incidents of the process of manufacture. It cannot be said that the article in the vaccuum pan is sugar, since it is another distinct article of commerce (melado) after it has reached the centrifugals.

From Dr. More's quotations it appears that the tax in France is (as Bisset says) "stupidly based on the color;" and that, to

the great detriment of the revenue, the color is darkened with caramel when the sugar is "nearly centrifugated;" yet we do not find that this color is not the accepted basis of taxation, but the contrary.

"FOURTH." Record 35, folio 107.

The fourth request was erroneous in its assumption that there are any gradations or grades of sugar, for the purpose of affixing duties thereto, other than those indicated by the Dutch standard of color. Though that standard embraces twenty *colors*, our Revised Statutes divides all sugar importations into but six "*grades*," determinable by reference to five or six of the Dutch numbers.

The latter part of this request erred in assuming that the manufacture of the sugar of commerce ended with the formation of its crystals in the vacuum pan. As it has been abundantly shown, where the entire product of the vacuum pan becomes an article of commerce it is melado and not sugar.

"FIFTH." Record, 35; folio 108.

It is the sugar of commerce, as it was sold, bought and imported, that is dutiable according as its color corresponds with certain numbers of the Dutch standard of color. If it is the sugar of commerce, then the statute only authorizes the levying of a duty thereon by comparing its color with the prescribed colors. If any foreign substance were mixed with the sugar after it became sugar of commerce, such extraneous matter might be removed to ascertain the true color; but the dutiable color of an importation which is the sugar of commerce, just as it came from the manufactory, is ascertainable only by comparison of it with the statutory standard.

If *sugar* is imported, what right has the Government to manipulate it?

The Court will bear in mind that pure sugar is white; that the tendency of crystallization is to throw all impurities to the surface, and that the only or chief color one would *naturally* expect, *i. e.*, expect according to the laws of nature, would be such color as would arise from dark-colored, not crystallible, products of the cane adhering to the surface and mingled in the interstices of the sugar crystals.

"SIXTH." Record, 35, fol. 108.

It is enough that this request finds not the slightest support in the evidence.

"SEVENTH." Record, 35–6, fol. 109.

The tariff makes no distinction between sugar separated from its molasses by means of centrifugals and that eliminated by more antiquated processes. The Dutch standard was generally accepted long before centrifugals were invented. Because one *can* make a lighter sugar by modern applicances he is not *bound* to do so. Using such machinery as he pleases, he can make it produce sugar of such hue as suits him, *provided the product is the sugar of commerce.*

There was not the slightest evidence of the introduction of "foreign substances" at any stage. The defendant's witness, Abbott (Rec. 21, fol. 64) thought these sugars were colored by the use of lime and by burnt molasses; but the weight of the evidence was that its color was obtained by simply raising the temperature while the cane-juice was in the vacuum pan in conjunction with using a neutral juice. Abbott also testified that *lime* was always, *necessarily*, used in making sugar from cane-juice; used to a certain extent, it lightened the juice; beyond that, it darkened the juice. Lime, or its equivalent, being a necessity to the production of sugar, can hardly be deemed a "foreign substance;" neither is the molasses, from which the sugar is only separated by the centrifugals, foreign to it while both are in the vacuum pan. Yet there was absolutely *no* evidence of the introduction of any other "foreign substances" to justify the presentation of this request.

The instruction was also properly refused, because (or if) it assume that lime or heat could not rightfully be so applied as to produce sugar of a lighter or darker tint, as might best suit the wishes of the manufacturer. It is error to assume that the process which results in the whitest sugar is the only "natural one." There is no natural process for producing the sugar we import; it is all mechanically made. Nor is it all "natural," for the maker to seek to turn out the whiter article, if the dark will pay him better, either in increased product, or by opening to him markets otherwise closed. The natural process for producing white sugar, is unnatural for the production of brown. Nature does not put in the lime, nor (except as man causes combustion)

raise the heat of the vacuum pan; he who *must* put in *some* lime may decide how much will *naturally* produce *such* sugar as he wants to make. He who boils the pot may rightfully decide as to the amount of ebulition which will subserve his purpose.

"EIGHTH." Record, 36, folios 109, 110.

What has been said of the next preceding request seems to be largely applicable to this also.

"NINTH." Record, 36, folio 110.

This instruction could not be given as asked, because it assumed that the right of the jury to determine the correctness of the collector's classification depended upon the fact whether or not the importations corresponded with some one number of the colors of the Dutch standard of color.

The statute does not require such agreement. As already noticed, there are twenty numbers of Dutch standard of color, and importations are divided into but six grades. An importation of any color darker than No. 7, Dutch standard of color, is dutiable as No. 7 is; and so of the other grades.

This instruction concluded with a further request that must certainly condemn the whole, viz., that if the collector used "the best means" in his control to classify these sugars according to their true color, the verdict must be in his favor.

The question is not of "best" means, but of such as the statute prescribes, though far better may exist.

"TENTH." Rec. 36, folio 111:

If the importation be the sugar of commerce, it is that article, as imported, that is to be sampled and compared with the Dutch standard *of color* (not of fineness or sweetness) to ascertain the duty wherewith it shall be charged. There is no authority for subjecting it to any mechanical process before submitting it to the mere optical and mental operation of a comparison of colors.

But there was not the slightest foundation in the evidence for this request. Nobody pretended that the duties exacted of us were ascertained by any such proceeding. They were assessed under the Treasury circulars directing that the per centage of saccharine matter be considered in fixing the rate of duty to be paid.

The record does not show whether the sugars imported were

composed of larger or smaller or the same size crystals as those of the Dutch standards of color.

Referring to what we said relative to the fifth request as to crystallization, we add here that pulverizing or breaking up the crystals of any sugar below No. 20, will make it appear lighter to the eye than it was before so broken up. The color is always exterior to the body of the crystal, and if the interior is exposed to the eye, by breaking, the effect of lighter color is given to the mass.

"ELEVENTH." *Ib.*:

The remarks upon the next preceding request apply equally well to this.

STEPHEN G. CLARKE,
EDWIN B. SMITH,
WILLIAM M. EVARTS.
Of Counsel for Defendants in Error.

Supreme Court of the United States.

OCTOBER TERM, 1881.

EDWIN A. MERRITT, COLLECTOR, &C.,
Plaintiff in Error.

vs.

SAMUEL WELSH, JOHN WELSH, JOHN WELSH, JR., OSGOOD WELSH, JOHN L. WELSH AND BENJAMIN PERKINS.
Defendants in Error.

No. 1066.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF NEW YORK

BRIEF OF DEFENDANTS IN ERROR IN REPLY.

JUDD & DETWEILER, PRINTERS.

Supreme Court of the United States.

OCTOBER TERM, 1881.

No. 1066.

MERRITT, COLLECTOR, *vs.* WELSH AND OTHERS.

ADDITIONAL BRIEF FOR DEFENDANTS IN ERROR.

Since the preparation of our brief in this case the Solicitor General has filed his brief herein, and in connection therewith a pamphlet of Dr. Gideon E. Moore, an expert witness for the Government on the trial. This pamphlet, printed, as it is, by the Treasury Department as an official document, and presented to the Court as an argument in the case, must be held to present the departmental view of the questions at issue, and to require from us a more careful examination than we should, from our own views of its intrinsic merit, be inclined to give it.

DR. MOORE'S STATEMENT.

I.

Dr. Moore (and the Department which has put forth his statement as its own *official* document) conceive the issue of the present controversy to rest essentially on three questions, the first of which is, "At what stage of the operation

of sugar making does sugar *begin* to exist *as an article of commerce*;—and, more especially, as an article subject, under the tariff laws of the United States, to classification for the appraisement of duty?"

The first clause of this question is enigmatical, and even contradictory; nor do we perceive that any part of it has any application to the facts presented by this record. What is the meaning of the words "begin to exist" in the connection in which they are used; and what possible light does the *beginning* of the existence of commercial sugar, in the vacuum-pans of Cuba, throw upon the duty to be exacted upon the article which is imported into this country? In a certain sense, sugar begins to exist in the juice that runs up the growing cane, from which it is ultimately to be extracted by the combination of mechanical and chemical appliances; but how can it exist "*as an article of commerce*" in any stage of the manufacture of the article of commerce? How can it exist, as such article, until the process of making the article that, *eo nomine*, is bought and sold is completed? So of every article of merchandise. When does a shawl or boot "*begin* to exist" as the shawl or boot of commerce? Suppose there were a capitation tax upon all immigrants: when would the subject of such taxation "begin to exist" at the place of nativity as a possible immigrant?

There is another fallacious suggestion in this inquiry, if it is meant to assume that any right of taxation—or of investigation with reference to a contingent right subsequently to tax—can possibly attach to the crystals of sugar as they first form in the boiling mass; for no expert has yet been

paid by the Government a sum large enough to induce him to swear that these crystals, in their *original size*, are *ever* separated from the liquid in which they form, or that they are bought and sold as sugar. On the contrary, all the testimony shows that new supplies of fresh syrup are always drawn into the vacuum-pans to increase the size of the crystals *ad libitum*. *The mingled mass of the vacuum-pan is never bought, sold, known, or dutiable as sugar.* It has a distinct commercial name and existence, under which our laws subject it to duty—melado.

Even when concentrated it does not become sugar, though the law of 1875 provides that it shall then (and not till then) be classified as sugar is classified; *i. e.*, "according to color by the Dutch standard;" but still by its distinctive and commercial designation of "concrete" or "concentrated melada." The language of the statute is, "That concentrated melada or concrete shall hereafter be classed as sugar;" *i. e.*, as sugar is classed—*i. e.*, "dutiable according to color," &c.

II.

The terms of the second clause of Dr. Moore's first question are even more irreconcible with each other. The query is *felo de se*. It is "at what stage of the operation of sugar-making does sugar begin to exist * * * as an article subject, under the tariff laws of the United States, to classification for the appraisement of duty." The only possible answer is that at *no* stage of its manufacture does it become so subject.

Without repeating what has already been said about its becoming an article of commerce, *as sugar*, only when the sugar-making operations are completed, it is obvious that neither in any stage of these operations—whether in the vats, the vacuum-pans, or in the centrifugals—nor yet in the boxes or hogsheads in which the Cuban manufacturer or merchant offer it for sale is it amenable to the tariff laws of the United States. Judge Story has told us it becomes so only when the voyage of importation has terminated.

The sole question for our customs officers is: "what is this article which has been brought into this country from abroad?"

If it is found to be sugar of commerce, *and nothing else*, then it *must* be classified for duty according to the statutory methods.

III.

Dr. Moore's second and third questions, though containing some assumptions which we cannot admit, state questions fairly pertinent to the present discussion.

For a correct ascertainment of the positions of the respective parties to this suit, reference should be had to the record and to the briefs of counsel. Dr. Moore's statement of them is only useful in understanding the remainder of his essay. The Solicitor General would hardly accept here the doctor's conclusion (page 6, paragraph 8th and 9th,) that these importations were dutiable as a *non-enumerated* article. Yet this *reductio ad absurdum* is the logical sequence of the learned doctor's argument. No collector or secretary has ever thought of adopting this theory.

IV.

Dr. Moore commences his discussion (page 9,) after having stated his case upon the preceding pages, with the fact that *all* raw or unrefined sugars imported consist of pure sugar and molasses. In other words, the sugar of commerce, as it is generally brought into this country, contains more or less—usually a considerable quantity—of molasses. (See also Record, 27, folio 83.)

It may be noticed that here, as elsewhere throughout his essay, Dr. Moore uses the word "grade" as synonymous with the term "saccharine strength." A glance at the statutes shows that Congress does not so use it. It indicates the number of divisions made of the numbers of the Dutch standard. (See Act of 1875, our former brief, p. 18, top.) The Secretary of the Treasury vainly recommended Congress to reduce these grades or divisions to three. (See our opening brief, page 24.) The language there quoted from his report conclusively shows that, in the practical application of the statutes, "grades" had always been referred to the grouping of the numbers of the Dutch standard of color.

Dr. Moore also differs from the thrice-expressed opinion of the Secretary as to the character of the Dutch standard. The Secretary (*ubi sup.*) twice declared to Congress, and reiterated it to the Committee of Ways and Means, that this standard is "founded on color ALONE." Such being the fact, the act of 1861 refers as distinctly and exclusively to this quality of the article imported as though the words "in color" had there been added after "Dutch standard."

The whole history of the Dutch standard in color, and all the evidence in this case, shows that, whatever the ulterior purpose to be subserved thereby, it was adopted as a standard of color simply, and has been ever and only that, and nothing more. The assumption of Dr. Moore's pamphlet, and of the first division of the Solicitor General's brief—that there has been, or can be, any "oral explanation" (vide Mr. Phillips' brief, p. 21,) to the effect that this numerical standard was ever designed or "found to designate a sugar known by its color to be of a *certain* saccharine strength"—(*Id.*) has no foundation in fact, whether within or dehors the record. The Dutch standard of color was *never* made a test of the proportion of crystallizable sugar in a given quantity of the sugar of commerce. It is a test ot color. As to *that* quality of sugar, each number is a fixed and unchangeable standard; the same now as half a century ago. But who knows—what witness (expert or other) has told us—what is the relation of crystallizable sugar to other matter in the sugar of the Dutch Standard, or in the various numerations and classifications thereof.

As received and used at the custom houses, and among merchants, the bottles which compose the set or series which make up this standard are hermetically sealed. (Record, p. 7, folio 52; p. 25, top.) They are not subjected to the polariscopic test. If one bottle, or twenty, were so tested, it would afford no guide for action, because they are not put up in Holland as a test of any other quality of sugar than its color.

The Secretary of the Treasury, through his assistant, issued two circulars as to the use of the polariscope and the

application of the result obtained to the liquidation of duties upon the sugars so tested. One was July 19, 1879, and the other Sept. 2, 1879, (Record, 15–17.) In neither of these did he (for he could not) assign any fixed proportion of crystallizable sugar to the several bottles of the Dutch standard in use at the Custom House. In those very circulars, he refers to this standard only for the purpose of a comparison of *colors*. As such standard it has existed for a century. The polariscopic test is changed in less than two months after its adoption by the Department. In neither circular is there a definite, fixed relation (indicated by color) declared (for the purpose of assessing the duty) between the crystallizable sugar and the other constituents which make up the sugar of commerce. This necessarily follows from the fact that there is no such fixed relation, so indicated, in nature. It varies with the climate, the humidity of the growing season, and with manifold incidents of its manufacture. As stated in the first circular, all sugar containing between 90 and 94 per cent. of crystallizable sugar was to be deemed above No. 7 of the Dutch standard of color, regardless of its actual color. (Record, 16, top.) By the terms of the second circular only those having between 93 and 97 per cent. of crystallizable sugar were to be so treated. (Record, 16, bottom.) This shows that the Department had and has no definite standard, from Holland or anywhere else, of anything pertaining to sugar except its one quality of color. It is a mere assumption of the Secretary that the two tests (wet and dry) are equivalent. There is no degree of fixed humidity in sugar of commerce in any state short of complete refinement.

Had the Secretary established, or should he undertake to establish, under the decision of this court giving him such authority, any fixed relation between color and crystallizable sugar, it must follow that a sugar of a low crystallizable strength, but of a high color by the Dutch standard, is not to be deemed of such high color, but must be taken and deemed to be of a lower color by the Dutch standard than it appears to be; and duty must be assessed accordingly. No other result would be logical or just. It is a well-known scientific fact that such sugars exist.

All, however, that he has, so far, attempted to do is to assess a higher rate of duty than the color calls for, if the importation contains a certain degree of crystallizable sugar.

V.

The italicized statement of Dr. Moore, on page 11 of his pamphlet, "The manufacture of sugar as an article dutiable by the Dutch standard is terminated by the act of crystallization or granulation," is the foundation of his whole argument and of the Government claim in this case. If this fails, the argument falls to the ground. We think we have demonstrated the utter falsity of this position. We will, however, restate our conclusions.

The article on which duty is imposed is sugar; *i. e.*, sugar as it is known in our commerce.

The record shows that the sugars of commerce are of three general sorts, aside from the refined, viz.: muscavado, clayed, and vacuum-pan centrifugal.

That all these sugars are freed from their molasses to a

greater or less extent before importation, and do not become the specific variety of sugar until so freed.

That this separation from molasses does not take place until after granulation has been completed, and is a necessary process before the manufacture of commercial sugar is complete.

That before this separation the whole mass is known in our markets as "melada," or, when largely freed from water, "concrete" or "concentrated melada."

That our revenue statutes have for many years recognized these well established commercial distinctions.

It is conceded by Dr. Moore, as well as shown by the record, that as the crystals' *first* form they are minute, and are subsequently built up by accretion to the required size, this being especially true of the vacuum-pan process.

Abbott, a witness for the Government testified:

"*It is not abnormal or unnatural to make a large crystal.* Large crystals are made by drawing sufficient syrup into the pan and boiling it to a certain density. When you have got all the crystals you can out of the charge you have in the pan, then you draw another charge into the pan, and the crystallized sugar in that charge goes on to the sugar you have just crystallized, and so on; and you can keep up that operation for a week until you get the crystals the size of a peanut."

Record, p. 23, top.

The point of granulation, then, cannot be the time when the minute crystal just formed is the commercial article of sugar as known to our commerce, and upon which a duty is imposed as sugar, however true it may be chemically that such crystal is sugar.

It was conceded on the trial that the plaintiffs imported sugar of the particular variety known in commerce as *vacuum-pan centrifugal sugar.*

Until the article imported becomes the sugar of commerce, and is imported here, our revenue laws have nothing to do with it. The processes by which it became such sugar are immaterial.

If it had been colored by adding pigments, or if its color had been changed by mixture of some other substance, *e. g.* charcoal, it would not have been the sugar of commerce.

That it was indisputably *sugar of commerce* is conclusive that it had *a color appropriate to sugar of commerce.* If not, then it would have lacked a quality which sugars of commerce possess.

As before stated, it must be purged to a greater or less degree of the associate product, (molasses,) in the process of manufacture, before it becomes the sugar of commerce. Its color as sugar depends on the extent of the removal of the molasses, and the color of that molasses and other impurities remaining adhering to the crystals and in the interstices between them. The color of that molasses and the other impurities is affected by process of manufacture.

Says *Prof. Collier*, a witness for the Government:

"In making what I call natural sugar the addition of lime during the process is absolutely necessary, and the quantity that is used will affect both the *product* and *amount*, and the *color* of the product, and by the use of lime the producer can *determine the color and character of his product.* If he uses a less quantity he will get a less crystalized sugar and more of the saccharine properties in an uncrystallized

form. If an amount of lime short of the point of neutrality was used, I think the product would be of a light color. If he added lime until the juice was slightly alkaline, he would get the *maximum of crystallizable sugar*. The tendency of the addition of that amount of lime, particularly if he increased the heat somewhat beyond the ordinary point in the vacuum-pan, would be to darken the sugar."

Record, page 30, top.

We submit that if the manufacturer desires to obtain the "maximum of crystallizable sugar" and in doing so darkens his product it is entirely legitimate, and if that product is sugar of commerce and is imported here, it is dutiable not according to its strength in crystallizable sugar but according to its color by the Dutch standard, as the statute provides.

VI.

Dr. Moore's discussion of methods of classification, (p. 13,) so far as it refers to statutes prior to 1846, affords little if any light upon the present controversy. For fifteen years prior to 1861 the duty, as we have seen, was strictly *ad valorem*. The change from *ad valorem* to specific rates of duty, commencing in 1861, it is true, referred sugars to their various commercial designations, as had earlier acts. These methods were found unsatisfactory and the arbitrary test of the Dutch standard in color was soon adopted.

To us it seems idle to argue that, in deserting methods of classification which had been found unsatisfactory and in adopting others, Congress intended to retain the repealed methods of classification in substance. Yet this result is

the logical conclusion from Dr. Moore's argument on the statutes.

Our own views upon these statutes we have stated in our former brief, pp. 18–22.

THE SOLICITOR GENERAL'S BRIEF.

I.

The brief of Mr. Phillips, being the argument of an able and experienced lawyer, and not the essay of a doctor or scientific "expert," naturally takes no notice of Dr. Moore's "point" (*vide* his pamphlet, pp. 4, bottom, and 14 *et seq.*) that the act of Aug. 5th, 1861, Sec. 1, containing the first reference to the Dutch standard, does not expressly refer to it as a standard "in color."

It has never been anything else, either in the country of its origin or in the United States, or any other country, where it has been adopted. The testimony shows how it has always been used at our custom houses and among merchants. (Record, 14, bottom, 15, top, and 18.) The very circulars of July 19 and Sept. 2, 1879, which initiated the present controversy require first a comparison (of color *only*) with the Dutch standard bottles of sugar, before applying to importations the new, non-statutory, test of the polariscope.

The error which is the basis of the Government's case, and which therefor has to be defended by the Solicitor General, is the assumed existence of any fixed or definite relation between the color of sugar, according to the Dutch standard, and the quantity of crystallizable sugar it con-

tains, or as the Solicitor General terms it, "*saccharine strength.*" The two terms are not synonymous, for a portion of the saccharine product of the cane will never crystallize, and that portion of it capable of crystallization may in the process of elimination become "invert" as the technical term is, and incapable thereafter of crystallization, although still saccharine.

This error, as formulated in the Treasury circular, is to assume that sugar capable of yielding a certain amount of crystallizable sugar must be of a given number of the Dutch standard in color, no matter what color it appears to have.

This is what we understand the Solicitor General seeks to defend under his first point.

We agree with the Solicitor General (see his brief, 21, bottom) that "the expression, 'No. 7 Dutch standard in color' is a term of art *in commerce* which requires oral explanation;" but we dissent entirely from his conclusion that it "designates a sugar known by its color to be of a *certain* saccharine strength." The plaintiffs below (defendants here) showed at the trial, as we have seen, what the Dutch standard was, and how it was used—both at the Custom-house and among merchants. (Record, folios 44, 51, 52 and 54.) No evidence offered by the collector upon this point was excluded. The only evidence introduced by the defence, in respect to the Dutch standard, was that of Prof. Shearer (folio 71) and of Dr. Moore (folios 99 and 100). These were two chemists. Neither laid claim to any mercantile experience or knowledge. Dr. Moore's inference or conclusion from the language quoted by him from Von Kaufman's work—introduced by a "therefore" (Record, p.

33, folio 100)—must not be taken as testimony of a commercial fact; especially in view of the *uncontradicted* testimony of one of the plaintiffs, on cross-examination, found upon folio 51 of the record, in connection with his previous statement (folio 45) that "Buyers judge by the feeling, smell, color, and by the polariscopic test." Even Prof. Shearer only went so far as to say, in reference to the Dutch standard, "that the difference in color was produced by the difference in the percentage of crystallizable sugar, *and the greater or less amount of molasses present.*" (Record, 24, top; folio 72.)

The Dutch standard, as we know historically, is composed of the *clayed* sugars of the East India possessions of Holland. When Congress adopted it as a basis of grading sugars for duty, it cannot be that it had any idea of creating other than an arbitrary test, *i. e.*, the criterion of color. It was not adopted, as the Solicitor General argues, (His brief, p. 21, bottom,) "to designate a sugar known by its color to be of a certain saccharine strength." At the time of its adoption it did bear relation to the market value of sugars for consumption, because purchasers would pay for the bright, light appearance of sugars, although the crystallizable strength might be less than than that of a darker article. When the Dutch standard was first adopted methods of determining with any accuracy percentages of crystallizable sugar were unknown to science.

If Congress had intended to apply the duty according to crystallizable sugar contained in the importation it certainly

would not have adopted the Dutch standard in color and applied it to *all* sugars,—the muscavado, the clayed, and the vacuum-pan centrifugal,—when it knew (as it must have known) that they all *differ* from each other in crystallizable strength.

The vacuum-pan sugar—being of a very large crystal—must *ex necessitate* be stronger in crystallizable sugar than the muscavado sugar, which is of a very small crystal,—the color in each instance being exterior to the crystal.

Other things being equal, nobody can deny that textile strength is an important element in cotton goods, largely affecting their value in all commercial transactions. The first schedule, "A," of Section 2504 of the Revised Statutes regulates the duty assessed upon such goods with reference to the number of threads to a square inch. Should it be found that, by reason of the use of cotton of a different growth or otherwise, the specified number of threads did not give the same strength they did when the law was enacted, the collector could hardly contend that these provisions were not "a cast-iron rule" to him; and that two hundred threads now are the legal equivalent, in textile strength, to one hundred of those spun when the tariff was adopted. Yet the Secretary of the Treasury has just the same right to require a certain degree of textile strength in countable cottons that he has to require a definite proportion of crystallizable sugar in commercial sugars of a given color specified in the statue.

The bottles of the Dutch standard are sealed. They are intended to be, and always are, used so sealed. Hence,

nothing but the color, shown through the glass of the bottles, *can* be used as the standard of any comparison.

The evidence as disclosed by the record, the "oral explanation," called for by the Solicitor General, shows this method of comparison to be the only one known to commerce.

This alone we submit should be controlling, and a conclusive answer to his argument on this point.

Why may not Congress have laid down "a *cast-iron rule*" for effecting the comparison in question? (Defendant's brief, p. 22, bottom.) Why, when it has used (as the Solicitor General says, page 21,) a "term of art in commerce which requires oral explanation?" Upon that oral explanation being given, it appears that comparison by the "Dutch standard in color"—the "*term of art*" Congress has used—has only and always in our commerce been made in one way; may we not then say—or, rather, *must* we not say—that Congress *has* laid down "*a cast-iron rule*" for methods of comparison.

The preceding paragraph of his brief (p. 22,) introduced with an "if," is thus answered; because there is a statutory method of comparison, viz., that furnished by the oral explanation of what "Dutch standard in color" means among our merchants.

The statute only authorizes the Secretary to make regulations not inconsistent with law. It is inconsistent with law to introduce methods of comparison with the Dutch

standard not known among merchants at the time of its adoption by Congress.

The mercantile method of comparison is just as much the statutory method as though it were in words incorporated in the statute.

The Solicitor General says, (p. 23,) that the Secretary may make "regulations of practical matters as to which the law may be silent; matters, therefore, like the present." But, we submit, as to how the Dutch standard shall be used, the law is not silent. When Congress said "not above No. 7 Dutch standard in color" it said all. It said "not above No. 7," &c., as merchants understand it and make the comparison. That, we have seen, has always been by color and color alone.

II.

Another fundamental error of the Government's position is its assumption that there is a fixed, certain, or "true" color invariably attached to all vacuum-pan centrifugal sugars; and that, intentionally, to produce them of a darker color is a fraud, equal to clipping the King's coin. It is assumed that this "true" color is necessarily the lightest that the cane juice can be made to produce by this method of manufacture; that this is the only "natural" way of using this particular kind of machinery upon the material; all other being "unnatural" and "willful manipulation."

Thus, in his statement, upon the lower half of page 10 of his brief, the Solicitor General speaks of the "*true color*, or sugar color, and the *artificial color*, caused by willful ma-

nipulation," and supports this view in the first division of his argument, (pp. 22, 23,) where he speaks of an "exceptional color" being given by "*fraudulent* manipulation."

However seriously and strenuously urged and ably advocated, we respectfully submit that all this is, in reality, but a mere juggle with terms.

No sugar of any color, and no color of sugar, is produced naturally; i. e., without resort to mechanical and chemical processes. Using these, they may rightfully be so employed as to subserve the purposes of the manufacturer, in the production of *such* sugar as he wants to make. All color is imparted by the will, art, and skill of the manufacturer.

If, as Prof. Collier tells us, (Record, folio 88) the vacuum-pan was contrived to obtain as large a quantity of sugar as is possible of a large, hard grain and light color, that can be put upon the market and consumed, why is it not just as much a fraud upon our revenue laws for the foreign manufacturer to persist in the use of more antiquated methods, which necessarily result in a sugar of less crystallizable strength, as it is to produce such sugar by more modern appliances? How can it be all right and proper to produce such sugar in one way, and a fraud and deceit to make it in another? If the only "natural" (and, therefore, the only fair and honest) course for a planter to pursue is to take from the centrifugals the lightest and strongest sugar they will turn out, why is it not equally natural, and as much required of him in justice and fair dealing, to adopt the machinery that will produce such sugar?

If he can purchase and use such machinery as he finds best suited to his means and wants, he can so employ it as to produce such an article as he may choose to manufacture; with this limitation, as to coming into the United States under our revenue laws, that it must be sugar of commerce.

This was the purport of the expression used by the judge presiding at the trial, that "the manufacturer may make his sugar as he chooses," (folio 79,) mentioned by the Solicitor General, at the bottom of page 7 of his brief, and again upon page 21. The judge's language is to be understood in connection with the claim, substantiated by the plaintiff, that what they had imported was *sugar*—commercially such. The color imparted by the processes and in the course of making commercial sugar—and which does not prevent its becoming such sugar—cannot be a *dis*-coloration. A factitious color, imparted after it has become such sugar, is a discoloration. The fallacy of the Solicitor General's argument is in assuming that there is, antecedently to the production of the sugar, an abstract or ideal color, recognized as belonging to it by law, to which it must be made to conform.

It is the same fallacy, couched in different language, (upon page 26, bottom,) where it is submitted "that there is a *natural* process for the elimination of sugar; a process in accordance with the laws of nature," &c. The same law of nature prevails in the production of dark sugar as of light. A given quantity of lime and a certain degree of heat will result in light-colored sugar; a little more lime added will produce *more sugar*, but of a dark color. We assert that is no more unnatural to manufacture the "larger

product" (Record, 22, bottom,) of darker color than it is to make a smaller production of a lighter color. The planter has the same right to apply the natural law of increased production that he has to apply that which gives light sugar.

III.

As the Solicitor General says under his second point, (page 26,) pure sugar is colorless; but every one knows that sugar of commerce as it is imported is not pure sugar. It contains impurities and various products of the sugar cane not eliminated in the process of manufacture which are not capable of becoming pure crystallized sugar. Such are the facts and no process of reasoning can change them.

We do not concede that there is "a natural process for the elimination of sugar." All the processes are artificial, and so far as our tariff laws are concerned, such process may be adopted as will eliminate that sort of sugar which will best pay the producer.

It would be idle for the producer to cut himself off from this market by making a sugar above No. 16 Dutch standard in quality of color, when by less labor he can get an increased product of No. 7, which he can sell in this market.

A red or a blue sugar would not be a sugar of commerce, and a sugar dyed brown with an analine dye would not pass between merchants on a contract for the delivery of sugar of a given grade of color. Our sugar, however, was not of that kind. The record shows it was sold for sugar. The purchasers were named. The Government did not call

them to contradict our statement that we had sold and delivered sugar. (Record, folio 42.)

It is not apparent how something derived from the sugar cane itself and which has never been eliminated, can be deemed a foreign material added in the process of manufacture, more especially as such non-eliminated substances are always present in a greater or less degree in all sugars not completely refined.

The limit of manipulation is easily put upon the choice of means to affect the color of the sugar produced. We quote again the language of the Judge who presided at the trial :—

> " *The duty is imposed upon sugar of commerce.* The test by which it is to be classified is to be applied *to the production which has become the sugar of commerce.*"

The limit of manipulation is the necessity that the production shall be sugar of commerce. With as much propriety might the Solicitor General argue that a manufacturer should not purposely make his woollen cloths to weigh less or more then five ounces a square yard; or should not purposely put in a percentage of cotton sufficient to change the rate of duty, or should not purposely take his jewels from their setting in order to import them at ten instead of twenty-five per cent. duty. We stand upon the right of an American merchant to buy goods abroad that are truly and honestly the goods they pretend to be, and to import those goods as he buys them, and to pay duties upon them as found in the laws enacted by Congress, and he is not liable to pay more duties upon fine-spun theories of Treasury officials,

that if the goods had been made *differently* they would have come into a *different* classification.

If a merchant buys books which have been printed nineteen years, with intent to import them into this country, is it a fraud that he delays the actual importation one year in order to import them free?

Not admitting that the case shows any "*discoloration*" of our sugar, we say that it certainly limits the argument when the case shows, as it does, that the color presented on importation was a color arising during the process which produced sugar of commerce—the sugar which was imported.

If the "flocks conceived before the rods and brought forth cattle ringstreaked, speckled and spotted," the progeny were none the less, but rather by reason thereof, the property of Jacob. The remedy of Laban was to make a new contract, or change his herdsman.

If Jacob had spotted the cattle after they were brought forth by a skillful application of paint, or otherwise his title might well have been considered doubtful.

If color is, as claimed by the Government, a fallacious test of the real value of sugar, and it is desirable to have the duty bear relation to value, the remedy is with Congress to change the law. If, however, Congress is content that only sugar that must be refined shall be imported, it may continue to refuse to change the law, notwithstanding this court should refuse to authorise the change the Secretary has attempted to make in the law by the entering wedge of the order of September 2.

The Solicitor General continues, (p. 28):

"I confess an inability to appreciate the distinction drawn by the learned judge in the court below betwixt an apparent color imparted *after* sugar of commerce has been formed, and such color imparted *before*."

To us the reason is manifest. The color imparted before the sugar of commerce has been formed is imparted in the process of manufacture which results *in* sugar of commerce, and the quality of color it then has is appropriate to it and *ex necessitate* the *true* and *natural* color of that particular sugar.

On the other hand, if sugar of commerce has something extraneous added to it after production, after it becomes sugar, you have sugar *plus something else*. It may be sugar and charcoal, which is not the sugar of commerce.

IV.

The Solicitor General in his third point especially submits as erroneous the refusal to charge the 11th request. This request was:

"11. Sugars composed of crystals larger than those of the standards furnished by the Secretary of the Treasury may properly be reduced to the same fineness as those of such standards, and packed in bottles in the same manner for comparison with such standards, in order to determine the color or classification."

And he argues:

"The difference betwixt an artificial discoloration and a true sugar color of like grade is shown by the comparatively

slight amount of the former which effects the purpose. If sugar affected by the former be ground up, the true color, or very nearly that, is immediately revealed."

This is entirely fallacious. The best test of the fallacy is to take any dark sugar and crush it. Take sugar from one of the Dutch standards and crush it. But it is also apparent upon a consideration of facts as disclosed by the record and the facts of chemistry, in the light of which this Court must act.

"Pure cane sugar separates from a solution by slow evaporation in large transparent colorless crystals, having the figure of a monoclinic prism."

Of necessity it follows, the process of crystallization being one of purification, extraneous substances are thrown to the surface, and the color of sugar as imported is something extraneous to the crystal of sugar which forms the bulk of the mass.

To crush that crystal and bring the white interior to the surface would not present the true color of that sugar as dealt in as an article of commerce.

The Dutch standard was adopted in commerce long before vacuum-pan centrifugal sugars were made.

The latter class of sugars were, however, known to our commerce when Congress adopted the Dutch standard in color as a basis for dutiable grades.

It is in accordance with long practice to make large crystals by the vacuum-pan process, crystals much larger than most of the crystals in the clayed sugars found in the Dutch

standards. To crush the larger crystal without crushing the smaller would be manifestly unfair. To crush the crystals of the Dutch standard, you would no longer have the standard in color as recognized by the commercial world and intended by our statutes.

There is no authority of law for our revenue officers to do either.

V.

No ingenuity or prolixity of argument, legal or scientific, can dissemble the point of this controversy.

The merchants claim a right to import the sugars of commerce as for sale in the foreign markets of the place of production, and as most suitable to their calculations of profit in the domestic markets of consumption.

So far as duty forms an element in their calculation of commercial profits, the merchants claim that the revenue laws are fully satisfied by their presentation of fair and honest samples of their imported sugars of commerce to the custom officers for the scrutiny prescribed by the statutes.

The merchants claim that this scrutiny exacts, and permits, only a comparison of occular demonstration between these samples with the closed vials of the Dutch standard, to determine the rate of duty by the color of the commercial sugars, according to the scale of color marked on these closed vials of the Dutch standard.

If these claims of the merchants were just, the judgment below must be affirmed.

The Government claims that the rate of duty on commercial sugars is determinable under the statute neither by their color, nor by occular demonstration, nor by the scale of color of the closed vials of the Dutch standard.

On the contrary, the Government claims, that saccharine strength ascertained by scientific optical inspection of the refractive power of, so to speak, the essence of sugar, shall determine the rate of duties, discarding, utterly, color and the Dutch standard from the proceeding.

The words of the statute may well be left to decide this contestation between the merchants and the Government.

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